and a market capitalization of $20 billion.[19,20]

21. Lehman filed for bankruptcy on the morning of Monday, September 15, 2008. At the time of its bankruptcy, Lehman was the fourth largest investment bank in the United States and employed over 25,000 people worldwide.[21] Lehman's bankruptcy was—and still is—the largest bankruptcy in U.S. history.[22] According to BankruptcyData.com, Lehman's assets at the time of bankruptcy were roughly $690 billion. Lehman had more than six times the assets of WorldCom, which was the largest bankruptcy in U.S. history prior to Lehman's collapse. Lehman also had approximately two times the assets of Washington Mutual, which filed for bankruptcy shortly after Lehman, making it the second largest bankruptcy in U.S. history after Lehman.[23]

22. On September 15, 2008, general market indices suffered large negative movements in response to Lehman's bankruptcy filing. The S&P 500 lost almost 4.7 percent, dropping to levels not seen since 2005. Similarly, the Dow Jones Industrial Average ("Dow") and the NASDAQ Composite ("NASDAQ") fell 4.4 and 3.6 percent, respectively.[24]

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19 Lehman Brothers Holdings Inc., Form 10-Q for the quarter ended May 31, 2008, p. 5.

20 Lehman's market capitalization peaked on February 2, 2007 at $44.4 billion. Bloomberg L.P.

21 "Lehman Bros Files for Bankruptcy," BBC News, September 16, 2008, available at http://newsvote.bbc.co.uk/mpapps/pagetools/print/news.bbc.co.uk/2/hi/business/7615931.stm, viewed on July 13, 2011.

22 "Lehman Brothers filed the largest bankruptcy case in history on Monday, Sept. 15, as the storied investment bank fell prey to the credit crisis." ("Top 10 Bankruptcies," *Time,* available at http://www.time.com/time/specials/packages/article/0,28804,1841334_1841431,00 html, viewed on July 13, 2011.) See also "20 Largest Public Company Bankruptcy Filings 1980 – Present," BankruptcyData.com, available at http://www.bankruptcydata.com/Research/Largest_Overall_ All-Time.pdf, viewed on July 13, 2011.

23 WorldCom had $104 billion in assets prior to filing for bankruptcy on July 21, 2002. Washington Mutual, Inc had $328 billion in assets prior to filing for bankruptcy on September 26, 2008. ("Top 10 Bankruptcies," *Time,* available at http://www.time.com/time/specials/packages/article/ 0,28804,1841334_1841431,00 html, viewed on July 13, 2011.) See also "20 Largest Public Company Bankruptcy Filings 1980 – Present," BankruptcyData.com, available at http://www.bankruptcydata.com/Research/Largest_Overall_All-Time.pdf, viewed on July 13, 2011.

24 Bloomberg L.P.

IV. The Market Prices of Lehman's Debt, Equity, and Credit Default Swaps Did Not Indicate that Bankruptcy Was Reasonably Foreseeable

23. In this section, I examine the prices of Lehman securities (bonds and equity). In an efficient market, rational investors incorporate publicly available information regarding the prospects of the firm into the prices at which they transact. More specifically, debt prices incorporate market participants' beliefs about the issuer's ability to repay its obligation. Furthermore, in an efficient market, the price of a stock incorporates all available public information regarding the prospects of the firm. Thus, if bankruptcy were reasonably foreseeable, this information would be reflected in the security prices of Lehman's debt and equity. Other instruments, such as credit default swaps, also incorporate market sentiment regarding the likelihood of default.

A. Lehman's Bond Prices Did Not Indicate a Bankruptcy Filing Was Reasonably Foreseeable

24. The bond price represents the present value of expected future cash payments of its coupons and principal, discounted at an appropriate risk-adjusted rate of return.[25] All else being equal, if the probability of a company's bankruptcy increases, the prices of its bonds decline. Usually, after a company defaults on its debt or files for bankruptcy, its bonds trade, on average, for 30 to 40 cents on the dollar, depending on the seniority of the bond.[26] If bankruptcy is foreseeable or expected by investors, the prices of a company's bonds should trade in this range, as investors will have incorporated the expectation of bankruptcy into the bond

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[25] Brealey, R., Myers, S., and Allen, F., *Principles of Corporate Finance*, Tenth Edition, McGraw-Hill/Irwin, 2010, pp. 46-47.

[26] "Corporate Default and Recovery Rates, 1920-2008," Moody's Investors Service, February 2009, p. 7. Seniority refers to the order in which debt is paid in bankruptcy; holders of more senior debt are generally repaid out of available assets before the holders of less senior debt receive any payment. Thus, all else equal, purchasers are generally willing to pay more for a bond with higher seniority. In particular, I note that, according to Moody's, senior unsecured claims have a post-default price of 36.4 cents per dollar for bankruptcies filed between 1982 through 2008.

price.

25. To analyze the market's assessment of Lehman's ability to repay its debt, I examine the prices of Lehman's outstanding publicly traded bonds in the year preceding its Chapter 11 filing. Exhibit 1 enumerates the 25 largest outstanding issuances of Lehman's debt ("Lehman bonds") when Lehman filed for Chapter 11 bankruptcy protection on September 15, 2008. These bonds represented approximately 30 percent of Lehman's total outstanding long-term debt. In addition to these 25 bonds, I also conduct my analysis on the Lehman note held in Plaintiff's securities lending portfolio (the "at-issue note").[27]

26. Because bond prices may differ due to their priority in bankruptcy, I examine the bond prices by their seniority. All else equal, more senior claims tend to trade at higher prices because they tend to recover more in the event of a default. Exhibit 3 shows weighted-average aggregate prices for Lehman's bonds from Exhibit 1, with available pricing data, segregated by their seniority—senior unsecured claims or subordinated claims. As demonstrated in this exhibit, even the subordinated Lehman bonds traded around 85 cents on the dollar one week prior to the bankruptcy filing.[28] In fact, for the majority of the time prior to the week before bankruptcy, the senior unsecured bonds traded above 90 cents on the dollar, and, on average, traded close to 80 cents on the dollar for the two trading days prior to Lehman's bankruptcy filing. These high prices for the Lehman securities (compared to the average of 30 to 40 cents for companies that file for bankruptcy) indicate that bond investors did not expect the bankruptcy filing on

27 Historical transaction prices for the Lehman at-issue note are not available from commonly used market data sources (for example, Bloomberg and Capital IQ). Therefore, I use market prices available in TRACE for notes comparable to the at-issue note in order to build a price series for this note. See Exhibit 2 for details on the comparable notes.

28 In this analysis, I use prices from Trade Reporting and Compliance Engine ("TRACE") which reflect actual transaction prices for the bonds. TRACE is the vehicle developed by the Financial Industry Regulatory Authority, Inc. ("FINRA") that "facilitates the mandatory reporting of over the counter secondary market transactions in eligible fixed income securities. All broker/dealers who are FINRA member firms have an obligation to report transactions in corporate bonds to TRACE under an SEC approved set of rules." See http://www finra.org/Industry/Compliance/ MarketTransparency/TRACE/, viewed on July 13, 2011.

September 15, 2008.

27. I repeat the analysis for the Lehman at-issue note. In aggregate, prices for this note also traded for more than 90 cents for almost the entire time period leading up to the bankruptcy filing. In fact, the closing price for the Lehman at-issue note, as imputed by my calculation, was 82.44 cents on September 12, 2008, the last trading day before the bankruptcy filing.[29] The fact that Lehman's bonds traded at prices substantially higher than 30 to 40 cents, during the preceding year *and* immediately prior to the bankruptcy filing, indicates that investors did not anticipate the bankruptcy filing.

28. Closer examination of the decline in Lehman bond prices during 2008 suggests the price decline was due, at least in part, to factors affecting the entire financial industry, rather than idiosyncratic issues only affecting Lehman. In Exhibit 4, I compare Lehman's bond prices to the bond prices of comparable financial institutions in the year prior to Lehman's bankruptcy filing. Lehman's bond prices fell, on average, around seven percent between one year preceding its bankruptcy filing and 10 days prior to the filing. Likewise, bond prices for comparable financial companies fell, on average, around five percent over the same time frame. Furthermore, the price of the Lehman at-issue note decreased less than one percent for the same time period. Market and industry-wide factors depressed bond prices down during this time frame, so an imminent collapse of Lehman and not of its competitors seemed rather unlikely.

29. I also examine the rate at which Lehman's bond prices declined and find the decline in Lehman's bond prices was atypical of firms that filed for bankruptcy. To conduct this analysis, I benchmark Lehman's bond prices against the bond prices of firms that filed for bankruptcy. I create two comparison groups. The first group consists of banking and financial companies who filed for bankruptcy between January 1, 2007 and December 31, 2009, and had more than $1 billion in

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29 According to Interactive Data ("IDC"), the price of the Lehman at-issue note on that same day was 98.7 cents.

assets. Exhibit 5 shows the bond prices of these comparable institutions in the year preceding their bankruptcy filings. As shown in the exhibit, Lehman's largest bond issues declined, on average, close to 7 percent between one year preceding its bankruptcy filing and 10 days prior to its bankruptcy filing. On the other hand, bond values for banking and financial companies that filed for bankruptcy decreased, on average, close to 35 percent during the same measurement period.[30] The Lehman at-issue note also did not follow the same pattern as financial firms that filed for bankruptcy; this note decreased less than one percent during the same measurement period. Furthermore, the Lehman at-issue note decreased less than 16 percent between one year prior to bankruptcy and the second to last trading day before the bankruptcy filing.

30. The second comparison group includes companies in other industries that filed for bankruptcy between January 1, 2007 and December 31, 2009 and had more than $1 billion in assets. Exhibit 6 shows that the evolution of Lehman's bond prices over the year prior to Lehman's bankruptcy filing was not consistent with the pattern exhibited by the bond prices of companies in other industries in the year preceding their bankruptcy filings.[31] For example, as mentioned before, Lehman's largest bond issues declined, on average, close to 7 percent during the time period beginning one year preceding its bankruptcy filing and ending ten days prior to its bankruptcy filing. Similarly, bond values for companies in other industries that filed for bankruptcy decreased, on average, more than 75 percent during the same measurement period relative to their bankruptcies.

31. Additionally, Lehman was able to raise almost $28 billion in debt during the July

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[30] Mean and median values in Exhibit 5 are overstated because of CIT Group's bankruptcy agreement. "Under the bankruptcy plan approved by bondholders, creditors will end up owning the company. Most bondholders will also end up with new CIT debt worth about 70 percent of the face value of their old debt." (Wilchins, D., and Comlay, E., "CIT Group Files for Prepackaged Bankruptcy," Reuters, November 1, 2009, available at http://www.reuters.com/assets/print?aid=USTRE5A01NX20091101, viewed on July 13, 2011.)

[31] As a robustness check, I analyzed the impact that differences in maturity, coupon type, changes in interest rates, seniority, and recovery rates had in my analysis. I find that accounting for these factors only provides additional support for my conclusions.

1, 2007 to September 15, 2008 time period. As shown in Exhibit 7, Lehman was able to issue over $2.6 billion in the last calendar quarter of 2007, almost $6.0 billion in the first calendar quarter of 2008, and close to $5.0 billion in the second quarter of 2008. The majority of the debt issuances were senior unsecured. All else equal, this type of debt carries more risk than secured debt, which has a dedicated set of assets pledged to pay the obligation in the event of insolvency.[32] The ability of Lehman to issue debt in 2007 and through the summer of 2008 supports the conclusion that Lehman's demise was not foreseeable.

32. The analysis of Lehman's bond prices, considered both in absolute terms and relative to those of other bankrupt firms and competitors, as well as the prices at which Lehman's bonds were trading in early September, supports my conclusion that the market did not anticipate Lehman's bankruptcy filing, and therefore that the bankruptcy was not reasonably foreseeable.

B. Analysis of Lehman's Stock Price and Market Capitalization Did Not Indicate Bankruptcy Was Reasonably Foreseeable

33. In liquid, well-functioning markets, the market price of a publicly traded stock incorporates all publicly available information about a company's future prospects and risks, reflecting both industry-wide and company-specific factors.[33] This incorporation of available information is the hallmark of an efficient market.[34] Stock prices change quickly in response to new information. Therefore, I examine the stock price of Lehman and its peers to evaluate the market's assessment of Lehman's prospects.

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32 Downes, J., and Goodman, J.E., *Dictionary of Finance and Investment Terms (Barron's Financial Guides)*, Seventh Edition, Barron's Educational Series, 2006, p. 621.

33 Lehman's stock traded on the New York Stock Exchange, the "largest equities marketplace in the world." (Downes, J., and Goodman, J.E., *Dictionary of Finance and Investment Terms (Barron's Financial Guides)*, Seventh Edition, Barron's Educational Series, 2006, p. 459.) An analysis of stock prices provides useful information whether one is evaluating a company's debt or equity.

34 Fama, E.F., "Efficient Capital Markets: A Review of Theory and Empirical Work," *The Journal of Finance* 25:2, 1970, p. 383.

34. To quantify the extent of the "surprise" of Lehman's bankruptcy, I compare changes in Lehman's market capitalization, at a number of points in the 365-day period leading up to its bankruptcy, to the changes in the market capitalization of other U.S. firms that filed for bankruptcy between January 1, 2007 and December 31, 2009.[35] I measure erosion in market capitalization relative to market capitalization 365 days prior to bankruptcy. In Exhibit 8, I compare the decline in Lehman's market capitalization to that of banking and financial companies with assets of at least $1 billion that filed for bankruptcy during the relevant period; in Exhibit 9, I compare Lehman's erosion to that of companies in other industries with assets of at least $1 billion that filed for bankruptcy during the same period. These exhibits show that Lehman's market capitalization declined at a slower rate over most of the one-year period prior to its bankruptcy than that of most of the firms that filed for bankruptcy. Exhibit 10 plots the change in Lehman's market capitalization relative to the mean and median changes in market capitalization of all firms in Exhibits 8 and 9.

35. Only ten days before its bankruptcy filing, Lehman's market capitalization was still 36.3 percent of its value one year before the filing.[36] This valuation is in contrast to the other firms in Exhibit 8, which, at ten days prior to bankruptcy, retained only 9.2 percent on average (3.8 percent median) of their market capitalization one year before their respective bankruptcies. The other firms in Exhibit 9 retained only 7.9 percent on average (3.8 percent median) of their market capitalization one year before bankruptcy. As shown in Exhibit 10, at almost every point in the year prior to bankruptcy, Lehman's market capitalization as a percentage of its market capitalization one year prior to bankruptcy remained well above the median capitalization of other firms that filed

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[35] During the 365-day period, several of the firms in the sample, including Lehman, issued stock. This change in the number of Lehman's shares and its effect on market capitalization do not change my conclusion. U.S. firms were analyzed because Lehman was a U.S. institution, its securities were traded in U.S. markets, and because they would be subject to the same bankruptcy laws.

[36] The S&P 500 declined close to 16 percent over this time period.

for bankruptcy during the relevant period. The decline in market capitalization early in the one-year period for the other firms is in sharp contrast to the precipitous decline in Lehman's market capitalization in the last ten days before it filed for bankruptcy.

36. Furthermore, much of the decline in Lehman's market capitalization one year before filing for bankruptcy was due to factors affecting the entire financial industry, rather than idiosyncratic issues only affecting Lehman. In Exhibit 11, I compare changes in Lehman's market capitalization to changes in the market capitalizations of comparable financial institutions in the year prior to Lehman's bankruptcy filing. The change in Lehman's market capitalization 180 days before filing for bankruptcy was similar to the average change experienced by comparable financial institutions during this time frame. Furthermore, the average market capitalization of comparable financial institutions continued to decline for the remainder of the period, albeit at a different rate than Lehman's decline. Clearly, market- and industry-wide factors depressed equity prices during this time frame.

37. Exhibit 12 lists the amounts of capital Lehman was able to raise after July 1, 2007. In particular, in June 2008, Lehman struck a deal to raise $6 billion in capital from an array of institutional investors. As part of the deal, Lehman sold $4 billion of common stock priced at $28 a share and $2 billion of preferred stock that would convert into common stock in three years.[37] Buyers included the state pension fund of New Jersey and C.V. Starr & Co., the investment fund led by Maurice Greenberg, the former head of the American International Group. Investors in the deal said they were reassured by Lehman's actions.[38] BlackRock

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37 Rappaport, L., and Mollenkamp, C., "Lehman Bonds Find Stability - Executives' Ouster Sends Share Price To a Six-Year Low," *The Wall Street Journal*, June 13, 2008; and Anderson, J., and Story, L., "Lehman Posts Loss and Plans to Raise Capital," *The New York Times*, June 10, 2008, available at http://nytimes.com/2008/06/10/business/10lehman html, viewed on July 13, 2011.

38 Fineman, J., and Onaran, Y., "Lehman CEO Fuld Finds What a Difference a Week Makes," Bloomberg, June 14, 2008; and Kuykendall, L., "Greenberg: Lehman 'A Great Franchise,' Now Has Enough Capital," MarketWatch, June 10, 2008.

also invested in Lehman's equity offering, and stated that, "Lehman is not a Bear Stearns situation. Lehman Brothers is adequately structured in terms of avoiding a liquidity crisis."[39]

38. The ability of Lehman to access the public markets was not consistent with market participants anticipating a bankruptcy in the near future, especially because Lehman was able to raise significant amounts of capital by issuing common stock. Common stockholders have the lowest priority claim in bankruptcy, generally receiving nothing until more senior claims are settled.[40] In the event of bankruptcy, the common stockholders of relatively highly leveraged financial firms are more likely to receive nothing.

39. Based on my analysis of these data, I conclude that Lehman's stock price performance behaved similarly to that of its peers and that the erosion in its market capitalization was not consistent with the typical pattern exhibited by other firms that filed for bankruptcy. In conjunction with the fact that Lehman was able to sell approximately $6 billion in common and preferred stock three months prior to its bankruptcy filing, these events support my conclusion that the market did not anticipate the bankruptcy filing, and therefore that the bankruptcy was not reasonably foreseeable.

C. Lehman's Credit Default Swap Spreads Did Not Indicate Bankruptcy Was Reasonably Foreseeable

40. Credit default swaps are, in effect, insurance contracts that compensate the insured party ("protection buyer") for any reduction in the value of a bond or other debt instrument that occurs when a specified issuer defaults or experiences some other defined "credit event" like a bankruptcy filing. In exchange for

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39 "BlackRock's Fink Says Lehman Not Another Bear," Reuters, June 11, 2008, available at http://uk reuters.com/assets/print?aid=UKN1146578820080611, viewed on July 13, 2011.

40 Downes, J., and Goodman, J.E., *Dictionary of Finance and Investment Terms (Barron's Financial Guides)*, Seventh Edition, Barron's Educational Series, 2006, p. 128. See also, Fabozzi, F.J., *The Handbook of Fixed Income Securities*, Seventh Edition, 2005, p. 16.

receiving this insurance coverage, the protection buyer makes regular payments to the insurance provider ("protection seller") over the life of the credit default swap, which can range from one to ten years. These regular payments are known as the credit default swap premium, or spread, which represent the percentage of notional amount of a bond for which the protection buyer seeks insurance coverage.[41]

41. In order to examine the foreseeability of Lehman's demise, I compare Lehman's one-year and five-year credit default swaps to those of companies that filed for bankruptcy between January 1, 2007 and December 31, 2009. If Lehman's bankruptcy was foreseeable one would expect to observe both a pattern and a level similar to those companies that also filed for bankruptcy. Exhibits 13 and 14 graph the credit default swap spreads of Lehman against the credit default swap spreads of other firms that filed for bankruptcy.[42] Prior to bankruptcy, the credit default swap spreads of these companies reached values substantially higher than those reached by Lehman. For example, one-year credit default swap spreads, for all firms that filed for bankruptcy but one, rose above 3,000 basis points before these firms filed for bankruptcy, with most firms reaching levels beyond 5,000 basis points. Similarly, five-year credit default swap spreads, for all firms that filed for bankruptcy but one, rose above 1,000 basis points before these firms filed for bankruptcy. The spreads surpassed 3,000 basis points for most firms. Lehman's one-year and five-year credit default swap spreads never reached these levels. Lehman's one-year credit default swap spread peaked just above 1,000 basis points only four days before filing for bankruptcy. Similarly, Lehman's five-year credit default swap spreads peaked just above 600 basis points three days before filing for bankruptcy. Both the movement and level of

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41 Credit default swap spreads are quoted in basis points (hundredths of a percent). A credit default swap spread of 100 basis points, for example, requires an annual payment of $50,000 for protecting a debt issue with a face value of $5 million.

42 Due to data limitations, it is not possible to compare the CDS spreads for Lehman with CDS spreads for other bankrupt firms.

Lehman's credit default swap spreads did not appear to indicate that bankruptcy was forthcoming. Comparing Lehman's credit default swap spreads with the spreads of other firms that filed for bankruptcy supports my conclusion that Lehman's bankruptcy filing was not reasonably foreseeable.

42. Similarly, the absolute level of Lehman's credit default swap spreads does not imply a bankruptcy filing. For example, as shown in Exhibits 15 and 16, Bear Stearns' credit default swap spreads in March 2008 were similar to Lehman's credit default swap spreads in September 2008. Yet, Bear Stearns did not go bankrupt; instead, Bear Stearns was purchased by JPMorgan Chase, and its debt obligations were assumed by JPMorgan Chase.[43]

43. Furthermore, I also note that movements in Lehman's credit default swap spreads are highly correlated with those of other investment banks. Exhibits 15 and 16 show that while Lehman's credit default swap spreads were generally higher than those of its peers, the credit default swap spreads of investment banks increased in March 2008, at the time of the government-assisted acquisition of Bear Stearns by JPMorgan Chase.

44. Following the government-assisted acquisition of Bear Stearns by JPMorgan Chase, relevant credit default swap spreads (including Lehman's) declined to pre-March 2008 levels within approximately one month, and Lehman's credit default swap spread did not reach its peak March 2008 level again until immediately prior to its bankruptcy filing in September 2008 for the five-year credit default swap, and until mid-July 2008 for the one-year credit default swap.

45. Lehman's credit default swap spreads also behaved similarly to the credit default swap spreads of other comparable financial institutions. As Exhibits 17 and 18 show, the credit default swap spreads of comparable financial institutions also

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43 "Amended and Restated Guaranty Agreement," March 16, 2008, attached as Exhibit 99.1 to JPMorgan Chase & Co. Form 8-K, March 24, 2008. Certain Bear Stearns assets were not purchased by JPMorgan Chase. See, for example, "Maiden Lane Transactions," Federal Reserve Bank of New York, available at http://www.ny frb.org/markets/maidenlane html#, viewed on July 13, 2011.

spiked in March of 2008 and returned to pre-March levels within approximately one month. Furthermore, several comparable financial institutions had credit default swap spreads greater than Lehman's and did not file for bankruptcy. For example, National City, SLM Corp, and Ford Motor Credit continued to pay their obligations despite having five-year credit default swap spread levels greater than those of Lehman's five-year credit default swaps on the week before Lehman filed for bankruptcy.

46. On September 9, 2008, Lehman's five-year credit default swap spread was 322.5 basis points.[44] This level was surpassed by other financial institutions shortly thereafter, but these other financial institutions did not default on their debt obligations. The five-year credit default swap spread of Merrill Lynch passed this level in September 2008, and yet, Merrill Lynch did not declare bankruptcy.[45] Instead, Merrill Lynch was purchased by Bank of America. In this transaction, Bank of America assumed the debt obligations of Merrill Lynch and has continued to pay.[46] Additionally, the five-year credit default swap spread of Wachovia passed the same level for one week in July and again in September of 2008, but Wachovia did not declare bankruptcy.[47] Wells Fargo announced the purchase of Wachovia in October 2008 and assumed Wachovia's debt obligations.[48]

47. Further examination of credit default swap spreads corroborates the notion that the absolute price of Lehman's credit default swap did not indicate that investors

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44 Bloomberg L.P.

45 Bloomberg L.P.

46 Karnitschnig, M., Mollenkamp, C., and Fitzpatrick, D., "Bank of America to Buy Merrill," *The Wall Street Journal*, September 15, 2008; Bank of America Corporation Form 10-Q for the period ended March 31, 2009, p. 6; and "Agreement and Plan of Merger," September 15, 2008, p.5, attached as Exhibit 2.1 to Bank of America Corporation Form 8-K, September 18, 2008.

47 Bloomberg L.P.

48 "Wells Fargo to Buy Wachovia in $15.1 Billion Deal," *The New York Times*, October 3, 2008; and "Wells Fargo, Wachovia Agree to Merge," October 3, 2008, attached as Exhibit 99.1 to Wells Fargo & Company Form 8-K, October 3, 2008.

anticipated bankruptcy. Exhibit 16 indicates that the U.S. standalone investment banks in my sample (Goldman Sachs, Morgan Stanley, and Merrill Lynch) had credit default swap spreads greater than the September 9, 2008 spread level of Lehman at some point after Lehman's bankruptcy, and yet, none of these institutions filed for bankruptcy. In fact, the credit default swap spread of Morgan Stanley grew to be more than twice the highest level that Lehman's credit default swap spread ever reached, and yet, Morgan Stanley did not file for bankruptcy.[49] The analysis of Lehman's credit default swaps and the comparison to those of Lehman's peers supports my conclusion that Lehman's bankruptcy was not reasonably foreseeable.

48. Additionally, I compare Lehman's five-year credit default swap spreads to an index of credit default swap spreads of 125 North American investment grade firms published by Markit (the "CDX NA IG Index") over the period from July 1, 2007 to September 12, 2008. As shown in Exhibit 19, from November 2007 through May 2008 (excluding March, when the credit default swap spreads of Lehman and its investment bank peers increased at the time of the Bear Stearns' government-assisted acquisition), Lehman's five-year credit default swap spread was slightly lower (ranging from 5 to 72 basis points) than the sub-index of financial entities and exhibited a similar pattern through August 2008.[50]

49. Finally, in Exhibit 20, I compare Lehman's five-year credit default swap spread to the CDX NA IG Index and the credit default swap spreads of the top quartile companies comprising the CDX NA IG Index.[51] From July 1, 2007 through September 9, 2008, Lehman's spread was often below (and frequently well below) the spread of the top quartile.

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49 Bloomberg L.P.

50 The financial sub-index is made up of the entities in the CDX NA IG Index that the publishers identified to be in the financial industry. For the relevant time period, this sub-index includes 24 to 25 entities.

51 To calculate the top quartile credit default swap spreads, I replicate the CDX NA IG Index. The average difference between the reported index and the replicated index is 22 basis points.

50. Based on my analysis of credit default swap spreads of Lehman, companies that filed for bankruptcy, other investment banks, and the investment grade firms comprising the CDX NA IG Index, I conclude that Lehman's credit default swap spreads behaved similarly to those of other firms that did not file for bankruptcy. This analysis supports my conclusion that the market did not reasonably foresee Lehman's bankruptcy.

V. Sophisticated Market Participants and Analysts Did Not Reasonably Foresee Lehman's Bankruptcy

51. My analysis of market prices supports my conclusion that Lehman's bankruptcy filing was not reasonably foreseeable. In addition to market prices, market commentary and contemporaneous analysis by analysts (both credit and equity) provide additional support to my conclusion. If bankruptcy were reasonably foreseeable, the actions and decisions of sophisticated market participants and analysts would have reflected this foreseeability. Instead, I observe little evidence that these sophisticated market participants foresaw Lehman's bankruptcy filing.

A. Credit Ratings and Credit Agencies' Commentary Did Not Indicate Lehman's Bankruptcy Filing Was Reasonably Foreseeable

52. Lehman's creditworthiness (like the creditworthiness of other major corporations and financial institutions) was continuously monitored by all three major credit rating agencies ("major CRAs") —Standard & Poor's ("S&P"), Moody's, and Fitch.[52] Generally, credit rating agencies examine *issuer* and *issue* creditworthiness. The *issuer* rating reflects the issuer's ability to meet its senior, unsecured financial obligations; the *issue* rating reflects the risk that an individual

52 In 2007 the combined market share of Standard & Poor's, Moody's and Fitch was 95 percent. "Measuring the Measurers: Credit Rating Could Do with More Competition, and A Bit More Rigour," *The Economist*, May 31, 2007.

security or class of securities may not be fully repaid.[53]

53. Major CRAs evaluate the likelihood that companies, governments, and other issuers of debt will default on their obligations. The ratings are based on the major CRAs' review of detailed public and non-public financial information about the company in question, supplemented by conversations with management. Major CRAs consider a broad range of factors, both qualitative and quantitative, in evaluating a company's prospects and the risk of default. The weights assigned to the quantitative and qualitative factors and the analytical models used to process this information are not disclosed by major CRAs. Further, despite recent criticisms regarding credit rating agencies, credit ratings remain a widely used source for gauging credit risk.[54]

54. Major CRAs rate virtually all large issuers of fixed income securities. For example, S&P rates approximately $32 trillion of outstanding debt issued in 100 countries.[55] Moody's tracks over 12,000 corporate issuers, 25,000 public finance issuers, and 106,000 structured finance obligations in over 110 countries.[56] Fitch rates issuers in over 150 countries.[57]

55. If Lehman's bankruptcy were reasonably foreseeable, credit ratings should offer indications. Instead, I observe investment-grade ratings for Lehman. Major

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53 "Understanding Standard & Poor's Ratings Definitions," Standard & Poor's, June 3, 2009, p. 7; "Rating Symbols and Definitions," Moody's Investors Service, November 2009, pp. 5 and 8; and "Definitions of Ratings and Other Forms of Opinion," Fitch Ratings, October 2010, pp. 9,12 and 18.

54 "Credit ratings are the most common benchmark used to assess the ability of a bond issuer to make timely payments of interest and principal." See Morgan Stanley, "An Educational Look at Bond Credit Ratings," available at http://www morganstanleyindividual.com/ markets/bondcenter/ school/credit/default.asp, viewed on July 11, 2011. See also, Katz, J., Emanuel S., and Stephanou, C., "Credit Rating Agencies," International Finance Corporation, October 2009.

55 "Standard & Poor's | Key Statistics," Standard & Poor's, available at http://www.standardandpoors.com/about-sp/key-statistics/en/us, viewed on July 13, 2011.

56 "Moody's Corporation," Moody's Investors Service, available at http://v3.moodys.com/pages/atc.aspx, viewed on July 13, 2011.

57 "Fitch Ratings – Fitch Group Subsidiaries," Fitch Ratings, available at http://www fitchratings.com/jsp/creditdesk/AboutFitch faces?context=1&detail=19, viewed on July 13, 2011.

CRAs assigned ratings to Lehman that are historically associated with low probabilities of default. As shown in Exhibit 21, major CRAs rated Lehman's long-term unsecured debt as investment grade until its bankruptcy. S&P maintained a credit rating of A+ through June 2008; Lehman had a Moody's rating of A1 through July 2008. S&P downgraded Lehman to A on June 2, 2008, and Moody's downgraded Lehman to A2 on July 17, 2008. Fitch's rating was AA- through June 9, 2008, when it was downgraded to A+. Even after the downgrades, however, Lehman continued to be rated at least five notches above speculative grade.

56. Exhibit 22 provides a guide to the long-term ratings of major CRAs. An "A" rating from S&P is given to an obligor who has a "strong capacity to meet its financial commitments but is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligors in higher-rated categories."[58] "A" rated Moody's issuers are "subject to low credit risk."[59] Additionally, according to Fitch, "A" ratings "denote expectations of low default risk."[60]

57. Major CRAs also compile data on actual historical default rates for debt issuers with various ratings. As shown in Exhibit 23, issuers with the same ratings as Lehman after its downgrades ("A" rating by S&P, "A2" by Moody's, and "A+" by Fitch) are associated with cumulative two-year default probabilities of less than two tenths of one percent. In other words, less than two issuers out of every thousand issuers who received a rating of A from S&P defaulted within two years. For a Moody's rating of A2 or a Fitch rating of A+, this ratio is even lower.[61]

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58 "Understanding Standard & Poor's Ratings Definitions," Standard & Poor's, June 3, 2009, p. 10.

59 "Rating Symbols and Definitions," Moody's Investors Service, November 2009, p. 5.

60 "Definitions of Ratings and Other Forms of Opinion," Fitch Ratings, October 2010, p. 9.

61 Historical default studies have found that "higher credit ratings are associated with lower default probability." Within S&P's methodology, AAA rated issuers have historically had the lowest default rates, followed by AA rated issuers with the next lowest default rates, and so on. The historical default rates of issuers with ratings below B (CCC, CC, and C) tend to be even higher

58. The same holds true when analyzing Lehman's short-term ratings. Lehman was assigned a short-term rating of A-1 by S&P, P-1 by Moody's, and F-1 by Fitch from July 1, 2007 to September 14, 2008.[62] Exhibit 24 presents a guide to short-term credit ratings issued by major CRAs. An A-1 rating by S&P is given to an issuer with a "strong capacity to meet its financial commitments."[63] Moody's gives P-1 ratings to issuers who have a "superior ability to repay short-term debt obligations."[64] An F-1 rating by Fitch "indicates the strongest intrinsic capacity for timely payment of financial commitments."[65,66] Lehman maintained these ratings up to the date of its bankruptcy filing.[67]

59. S&P and Moody's also compile data on actual historical defaults of debt issuers by short-term rating category. As shown in Exhibit 25, issuers with the same short-term credit ratings as Lehman are associated with cumulative one-year default probabilities of less than one tenth of one percent.

60. In addition to their credit ratings, S&P, Moody's, and Fitch each publish an "Outlook" for rated companies, which expresses the agencies' opinions about the likely direction of an issuer's rating over the medium term (meaning, in the case

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still. The tendency for higher rated issuers to have lower historical default rates is consistent across all three major CRAs. The tendency for higher rated issuers to have lower historical default rates is also consistent for short-term credit ratings, though the rating scales are different. See "Default, Transition, and Recovery: 2007 Annual Global Corporate Default Study and Rating Transitions," Standard and Poor's, February 5, 2008, pp. 2 and 11; "Corporate Default and Recovery Rates, 1920-2007," Moody's Investors Service, February 2008, p. 27; "Fitch Ratings Global Corporate Finance 2007 Transition and Default Study," Fitch Ratings, April 30, 2008, p. 12; "Default, Transition, and Recovery: Global Short-Term Default Study And Rating Transitions," Standard and Poor's, June 21, 2007, pp. 15-16; and "Short-Term Corporate and Structured Finance Rating Transition Rates," Moody's Investors Service, June 2007, p. 2.

62 Bloomberg L.P.

63 "Standard & Poor's Ratings Definitions," Standard & Poor's, April 27, 2011, available at http://www.standardandpoors.com/ratings/articles/en/us/?assetID=1245303711350#ID578, viewed on July 13, 2011.

64 "Rating Symbols and Definitions," Moody's Investors Service, November 2009, p. 7.

65 "Definitions of Ratings and Other Forms of Opinion," Fitch Ratings, October 2010, p. 18.

66 Fitch changed Lehman's short-term credit rating from F1+ to F1 on June 9, 2008. (Bloomberg L.P.)

67 Bloomberg L.P.

of S&P, typically six months to two years).[68] S&P's Outlook for Lehman was "stable" through April 3, 2008, when it was revised to "negative."[69] Despite this change in its Outlook, however, S&P did not reduce its rating of Lehman until June 2, 2008, when the rating was lowered to A.[70] Moody's had a "positive" outlook for Lehman until March 17, 2008, when it was revised to "stable;"[71] Moody's revised Lehman's outlook to "negative" on June 9, 2008 and then placed Lehman's rating on review for downgrade on June 13, 2008,[72] but did not reduce its rating until July 17, 2008.[73] Fitch's outlook for Lehman was "stable" through April 1, 2008, when it was revised to "negative."[74] Despite this change in outlook, Fitch continued to rate Lehman AA- until June 9, 2008 when the rating was lowered to A+.[75] Fitch maintained Lehman's outlook at negative even after the downgrade but also affirmed Lehman's A+ rating in July 9, 2008.[76] Fitch

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68 "A Moody's rating outlook is an opinion regarding the likely direction of an issuer's rating over the medium term. Where assigned, rating outlooks fall into the following four categories: Positive (POS), Negative (NEG), Stable (STA), and Developing (DEV - contingent upon an event)." ("Rating Symbols and Definitions," Moody's Investors Service, November 2009, p. 43); "A Standard & Poor's rating outlook assesses the potential direction of a long-term credit rating over the intermediate term (typically six months to two years). In determining a rating outlook, consideration is given to any changes in the economic and/or fundamental business conditions." ("Standard & Poor's Ratings Definitions," Standard & Poor's, April 27, 2011, available at http://www.standardandpoors.com/ratings/articles/en/us/?assetID=1245303711350#ID578, viewed on July 13, 2011.)

69 "Summary Analysis: Lehman Brothers Holdings Inc.," Standard & Poor's, April 3, 2008.

70 "Research Update: Lehman Brothers Holdings Inc. Rating Lowered to 'A' From 'A+'; Outlook Negative," Standard & Poor's, June 2, 2008; and Bloomberg L.P.

71 "Rating Action: Moody's Affirms Lehman's A1 Rating; Outlook Now Stable," Moody's Investors Service, March 17, 2008.

72 "Rating Action: Moody's Changes Lehman's Rating Outlook to Negative," Moody's Investors Service, June 9, 2008; "Rating Action: Moody's Places Lehman's A1 Rating on Review for Downgrade; Prime-1 Affirmed," Moody's Investors Service, June 13, 2008; and Bloomberg L.P.

73 "Rating Action: Moody's Lowers Lehman Brothers Rating to A2; Outlook Negative," Moody's Investors Service, July 17, 2008; and Bloomberg L.P.

74 "Fitch Revises Outlook on Lehman Brothers to Negative; Affirms 'AA-/F1+' IDRs," Fitch Ratings, April 1, 2008.

75 "Fitch Downgrades Lehman Brothers' L-T & S-T IDRs to 'A+/F1'; Outlook Negative," Fitch Ratings, June 9, 2008; and Bloomberg L.P.

76 "Fitch Affirms Lehman Brothers' IDRs at 'A+/F1'; Outlook Negative," Fitch Ratings, July 9, 2008.

placed Lehman on "Rating Watch Negative" on September 9, 2008, but continued to rate Lehman A+ up to its bankruptcy filing on September 15, 2008.[77]

61. Moreover, even accounting for the credit rating downgrades during the summer of 2008, Lehman's credit rating did not exhibit a pattern similar to the credit rating patterns of companies that did file for bankruptcy. Moody's plots the average and median ratings of roughly 1,300 corporate issuers that have defaulted during the period 1983 to 2007. I have appended this chart as Exhibit 26 of this report. The data is presented for two cohorts: the issuers that defaulted between 1983 and 2007 and the issuers that just defaulted in 2007. The chart shows that Moody's-rated issuers have, on average, been downgraded to the Ba3 level as early as five years prior to default. Among issuers that defaulted in 2007, the average rating is B2 five years prior to default, which itself is low by historical standards. In the year prior to default, 2007 defaulters' ratings were downgraded to Caa1 on average, compared to B2 for issuers that defaulted since 1983. Regardless of which cohort we use for comparison, Lehman's credit rating was meaningfully higher than the credit ratings of other firms that eventually filed for bankruptcy.

62. To summarize, the consensus among the major credit rating agencies between July 1, 2007 and Lehman's bankruptcy filing was that Lehman had a "strong capacity to meet its financial commitments" and was "subject to low credit risk."[78] Moreover, issuers with the same ratings as those assigned to Lehman (following its downgrade to A in June 2, 2008 by S&P and A2 in July 17, 2008 by Moody's) have rarely defaulted on their debt (fewer than two issuers out of every thousand after two years as illustrated by S&P, Moody's, and Fitch data on the historical incidence of default by rating). Thus, the assessments of the rating agencies provide further evidence that Lehman's bankruptcy was not reasonably

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77 "Fitch Places Lehman Brothers on Rating Watch Negative," Fitch Ratings, September 9, 2008; and Bloomberg L.P.

78 "Understanding Standard & Poor's Ratings Definitions," Standard & Poor's, June 3, 2009, p. 10; and "Rating Symbols and Definitions," Moody's Investors Service, November 2009, p. 5.

foreseeable.[79]

B. Equity Analysts' Coverage and Recommendations Did Not Indicate a Bankruptcy Filing Was Reasonably Foreseeable

63. In addition to being monitored by the credit rating agencies, Lehman was also followed by equity analysts. Equity analysts examine the financial prospects of firms and provide earnings estimates, stock recommendations, commentary and analysis on many publicly traded companies. Brokerage firms spend significant resources gathering and analyzing company information. Analysts build reputational capital and are rewarded for being able to provide accurate forecasts and timely recommendations. Because of these reasons, analysts would have been in a position to opine on the foreseeability of a bankruptcy filing. If analysts were able to foresee Lehman's bankruptcy, one would expect to observe "sell" recommendations from most analysts covering Lehman.

64. Exhibit 27 summarizes the recommendations of the equity analysts surveyed by Thomson IBES who followed Lehman during the period from July 1, 2007 to September 12, 2008.[80] I find that throughout the entire period, at least 90 percent of analysts had a buy or hold recommendation for Lehman's stock. In some periods, all of the surveyed analysts had a buy or hold recommendation (that is, no analyst recommended selling Lehman's stock). Furthermore, as Exhibit 27 shows, in August and September 2008, the percentage of analysts recommending buy or hold for Lehman was greater than the percentage of analysts recommending buy or hold for Goldman Sachs or Merrill Lynch. Neither of these companies filed for bankruptcy.

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79 Furthermore, analysis by major CRAs also supports my conclusion that Lehman's bankruptcy was not reasonably foreseeable. For example, S&P discussed in a report "[t]he unforeseen collapse of Lehman Brothers." See Vazza, D., Aurora, D., and Kraemer, N., "Default, Transition, and Recovery: 2008 Annual Global Corporate Default Study and Rating Transitions," Standard and Poor's, April 2, 2009, p. 25.

80 For Lehman, Thomson IBES compiled the buy/hold/sell recommendations of approximately 20 equity analysts.

65. Exhibit 28 compares the percentage of analysts that issued a buy or hold recommendation for Lehman's stock against the mean and median percentages of analysts' buy or hold recommendations for comparable financial institutions. As the exhibit shows, the percentage of analysts that issued a buy or hold recommendation for Lehman's stock was higher than the mean and median percentage of analysts' buy or hold recommendation for comparable financial institutions from January through September 2008. Again, none of these financial institutions filed for bankruptcy.

66. I also review numerous equity analysts' reports filed between July 1, 2007 and September 15, 2008 and find none prior to September 9, 2008 that concluded that Lehman would likely file for bankruptcy.[81] Exhibit 29 presents the ratings and commentary excerpts from several of these reports. An increased expectation of a bankruptcy filing would depress stock prices. If Lehman's bankruptcy had been reasonably foreseeable, analysts who followed Lehman would have incorporated that expectation into their reports and discussed the implications and prospects; none did. Moreover, given that analysts have incentives to make accurate forecasts and recommendations and spend a great deal of their time gathering information on companies, analysts would have anticipated Lehman's bankruptcy, had it been reasonably foreseeable. Again, none did.

67. In the midst of Bear Stearns' government-assisted acquisition in March 2008, equity analysts argued that Lehman was not similar to Bear Stearns for several reasons. They pointed to Lehman's international diversification, strong execution track record, and seasoned management.[82] They also noted that Lehman, unlike Bear Stearns, had financial backing from the Federal Reserve and that "anyone

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81 I identify equity analysts' reports by searching Thomson ONE Banker's equity research report database. I review reports published by BernsteinResearch, The Buckingham Research Group, CIBC World Markets, Credit Suisse, Deutsche Bank, Fox-Pitt Kelton Cochran Caronia Waller, HSBC Global Research, JPMorgan, Ladenburg Thalmann, Morgan Stanley, Oppenheimer, Punk, Ziegel & Company, Raymond James Euro Equities, and Wachovia.

82 "Lehman Brothers Holding; It is not Bear," Deutsche Bank, March 17, 2008, p. 1; and "Upgrading to Buy; Reality Will Trump Fear," Citigroup, March 28, 2008, p. 1.

attacking Lehman would have to be able to bankrupt the Fed to break Lehman."[83]

68. Several analysts also evaluated the ability of investment banks, including Lehman, to survive, focusing on liquidity and access to credit. For example, a report issued by Buckingham Research Group in March 2008 stated: "All of the brokers besides [Bear Stearns] have total liquidity in excess of short-term debt and net repo financing, with [Lehman] the highest [most favorable] at 418% and [Goldman Sachs] the lowest at 116%."[84] Morgan Stanley Research issued a report titled "Lehman Brothers: Bruised, Not Broken – and Poised for Profitability" on June 30, 2008. The report stated "we believe downside risk stems from medium-term damage to the franchise rather than a Bear Stearns-like run-on-bank scenario;" the report further stated "we believe that comparisons to Bear do not hold up, particularly in the wake of the Fed's aggressive action [establishing the Primary Dealer Credit Facility] in the wake of Bear's collapse."[85]

69. Although Lehman experienced difficulties in June and July 2008, many market participants remained confident about its future. Several analysts maintained that Lehman was not another Bear Stearns situation and believed that Lehman was well positioned to not only survive the crisis but also expand and recover in the coming years.[86] Additionally, despite the fact that Lehman reported a loss for the second quarter of 2008, many research analysts remained optimistic about Lehman's prospects. Through June and July, equity analysts noted Lehman's strength in revenue, solid capital footing, lowered exposure to risk, and increased

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83 "Attacking the Federal Reserve," Punk, Ziegel & Company, March 18, 2008, p. 1.

84 "Evaluating Liquidity at the Rest of the Brokers in a 'Run on the Bank' Scenario," The Buckingham Research Group, March 17, 2008, p. 3.

85 "Lehman Brothers: Bruised, Not Broken – and Poised for Profitability," Morgan Stanley, June 30, 2008, pp. 3 and 8.

86 "Follow-Up Thoughts on Recent Bearish Arguments," Fox-Pitt Kelton Cochran Caronia Waller, June 4, 2008, p. 1; "Lowering Estimates," Deutsche Bank, June 5, 2008, pp. 1 and 2; "Lehman Brothers: Bruised, Not Broken – and Poised for Profitability," Morgan Stanley, June 30, 2008, p. 8; and "Greater Than Expected Loss, But More Than in the Stock," The Buckingham Research Group, June 9, 2008, p. 1.

diversification.[87]

70. Finally, even in the days immediately preceding Lehman's bankruptcy filing, analysts were not uniformly negative in their assessments. On September 10, 2008, Credit Suisse and JPMorgan gave Lehman a "Neutral" rating while Fox-Pitt Kelton Cochran Caronia Waller gave it an "Outperform" rating, Oppenheimer a "Perform" rating, Morgan Stanley an "Overweight" rating, and Deutsche Bank a "Buy" rating.[88] On September 11, 2008, Lehman was given "Outperform," "Buy," "Neutral," "Market Perform," "Hold," and "Underweight" ratings.[89] Analysts disagreed with the major CRAs' negative outlooks, stating that Lehman remained "one of the best companies on Wall Street."[90] In addition, HSBC reiterated that:

> *"Lehman is a better, more diversified franchise [than Bear Stearns]. It is much more conservatively funded, and carries a huge liquidity pool of some $42 billion. It has access to the Federal Reserve for emergency funding. It also has one thing that it shares with Bear Stearns—it is too big to fail in our opinion."*[91]

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87 "Greater Than Expected Loss, But More Than in the Stock," The Buckingham Research Group, June 9, 2008, pp. 2 and 3; "2Q08: Risks Are Coming Down; Reaffirm S. Buy," The Buckingham Research Group, June 17, 2008, pp. 1, 3, and 4; and "Plausible Downside on Fundamentals is Priced In," Morgan Stanley, July 24, 2008, p. 7.

88 "Starting the Clean Up: Follow Through Critical," Credit Suisse, September 10, 2008, p. 1; "Management Has Plan, Not Action – We Await Inv. Mgmt Sale," JPMorgan, September 10, 2008, p. 1; "LEH 3Q08: Core Results As Expected, Dispositions Bigger," Fox-Pitt Kelton Cochran Caronia Waller, September 10, 2008, p. 1; "LEH Reports 3Q08 EPS Loss of ($5.92) and Net Write-Down of $5.6B," Oppenheimer, September 10, 2008, p. 1; "Quick Take on 3Q EPS, Strategic Initiatives," Morgan Stanley, September 10, 2008, p. 1; and "3Q08 Pre-Release," Deutsche Bank, September 10, 2008, p. 1.

89 "LEH: A Great Restructuring Plan, But Will the Markets Get It?," Fox-Pitt Kelton Cochrain Caronia Waller, September 11, 2008, p. 1; "Rating Agency Risk Too High," The Buckingham Research Group, September 11, 2008, p. 1; "Lehman's Non-Strategy," Ladenburg Thalman, September 11, 2008, p. 1; "LEH: Pre-Announces and Highlights Initiatives – Adjusting Ests.," Wachovia, September 11, 2008, p. 1; "Downgrade from Buy to Hold on Rating Agency Reports," Deutsche Bank, September 11, 2008, p. 1; and "De-risking and Depending on Markets to Hold," HSBC Global Research, September 11, 2008, p. 1.

90 "Rating Agency Risk Too High," The Buckingham Research Group, September 11, 2008, p. 1; and "Lehman's Non-Strategy," Ladenburg Thalmann, September 11, 2008, p. 1.

91 "De-risking and Depending on Markets to Hold," HSBC Global Research, September 11, 2008, p. 5.

71. Overall, my analysis of equity analysts' reports shows that analysts consistently recommended buying or holding Lehman's stock leading up to September 2008. This is further supported by the fact that no analyst, of those with available information, concluded that Lehman was at risk of filing for bankruptcy prior to September 9, 2008. The assessments of the equity analysts further demonstrate that Lehman's bankruptcy filing was not reasonably foreseeable.

VI. Other Market Evidence Indicates that Lehman's Bankruptcy Was Not Reasonably Foreseeable

A. Lehman's Bankruptcy Was Not Reasonably Foreseeable Even in the Final Weeks Before Lehman's Collapse Because Other Actions Could Have Prevented Bankruptcy

72. As mentioned above, the outstanding Lehman obligations could be repaid if Lehman either continued as a going concern or merged with another entity who would assume those obligations. Lehman may have been able to continue as a going concern if, among other things, it had been able to restructure successfully, raise additional capital, or if it had received interim government assistance.

73. Although, as I detail in this report, Lehman was able to raise billions in capital from sophisticated investors, Lehman's bankruptcy may have been averted if it had raised additional capital. During this time, many investors were rumored to be possible investors.[92]

74. Months before its bankruptcy filing, Lehman was rumored to be in negotiations with several interested buyers. As early as July 2008, the Royal Bank of Canada

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92 See Gee, M., "Troubled Lehman Draws an Unlikely Suitor," *The Globe and Mail*, September 3, 2008; Bawden, T., "Kuwait fund keeps eye on US banks as Lehman seeks cash," *The Times (UK)*, June 5, 2008; "LEH: Analyzing the Firm's Shrinking Options…," BernsteinResearch, September 8, 2008, p. 1; "Going Private May Be the Best Course of Action," Fox-Pitt Kelton Cochran Caronia Waller, July 14, 2008, p. 1; and "Selling Neuberger Could Be Part of MBO/Going Private," Fox-Pitt Kelton Cochran Caronia Waller, July 25, 2008, p. 3.

considered buying Lehman.[93] In late August, reports of a possible buyout caused Lehman's share price to increase substantially.[94] By early September 2008, the list of potential buyers grew to include HSBC, Nomura, Bank of America, JC Flowers & Co., China Investment Co., and Barclays.[95] Although none of these mergers came to fruition, an acquisition could have prevented the bankruptcy filing.

75. Even without raising capital or being acquired, Lehman might have successfully restructured itself into a form that would permit it to continue as a going concern. One alternative raised in July was for Lehman to take itself private.[96] A second possibility mentioned in multiple analysts' reports was that Lehman could sell Neuberger Berman, Lehman's investment management unit.[97] An additional possibility was that Lehman might spin off its commercial mortgage assets into a new entity and then distribute the shares in that to Lehman's shareholders.[98] This solution was referred to as the "good bank/bad bank" solution and has

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93 Sender, H., "RBC Pulled Back from Lehman Bid," *Financial Times (FT.com)*, September 8, 2008.

94 Gangahar, A., "Lehman Buy-out Prospects Boost Wall Street," *Financial Times (FT.com)*, August 22, 2008.

95 Sender, H., Guerrera, F., and Larsen, P.T., "BofA, JC Flowers, CIC Planning Joint Lehman Brothers Bid," *Financial Times (FT.com)*, September 12, 2008; "LEH: Analyzing the Firm's Shrinking Options…," BernsteinResearch, September 8, 2008, p. 1.

96 "Going Private May Be the Best Course of Action," Fox-Pitt Kelton Cochran Caronia Waller, July 14, 2008 p. 1; "LEH: Analyzing the Firm's Shrinking Options…," BernsteinResearch, September 8, 2008, p. 4; and "Selling Neuberger Could Be Part of MBO/Going Private," Fox-Pitt Kelton Cochran Caronia Waller, July 25, 2008, p. 3.

97 "LEH: Analyzing the Firm's Shrinking Options…," BernsteinResearch, September 8, 2008, p. 1; and "Selling Neuberger Could Be Part of MBO/Going Private," Fox-Pitt Kelton Cochran Caronia Waller, July 25, 2008, pp. 1-2.

98 "Assessing Strategic Alternatives for Commercial Mortgage," Fox-Pitt Kelton Cochran Caronia Waller, September 4, 2008, pp. 1-3; Onaran, Y., "Lehman May Shift $32 Billion of Mortgage Assets to 'Bad Bank,'" *Bloomberg*, September 4, 2008, available at http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aQjsXBJ4uN1Y, viewed on July 13, 2011; White, B., and Anderson, J., "Lehman Weighs Split to Shed Troubling Loans," *The New York Times*, September 5, 2008, available at http://www nytimes.com/2008/09/05/business/05lehman html, viewed on July 13, 2011; and "Govt GSE Action Can Help," Deutsche Bank, September 5, 2008, p. 2.

successfully been employed by banks in prior financial crises.[99]

76. Additionally, many market participants viewed some form of government support as possible.[100] The government could have provided support through a variety mechanisms.[101] Some of these mechanisms were ultimately used to support other institutions.[102] Furthermore, some form of federal bailout of Lehman was highly likely. Lehman's bankruptcy Examiner wrote:

> *"Other senior members of the Government, Wall Street executives and experts doubted that the Government really would refuse to make money available for Lehman if necessary. As late as September 10, 2008, the FRBNY [Federal Reserve Bank of New York] circulated a presentation that discussed potential federal monetary assistance to Lehman. On September 11, 2008, Geithner's discussions with the Financial Services Authority (the "FSA") left open the possibility that there would be Government assistance. On September 12, 2008, Paulson advised the FSA that the FRBNY might be prepared to provide Barclays with regulatory assistance if necessary. Cox told the Examiner that Lehman's apparent belief that the Government would provide help was a*

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99 White, B., and Anderson, J., "Lehman Weighs Split to Shed Troubling Loans," *The New York Times*, September 5, 2008, available at http://www nytimes.com/2008/09/05/business/05lehman html, viewed on July 13, 2011; Onaran, Y., "Lehman May Shift $32 Billion of Mortgage Assets to 'Bad Bank,'" *Bloomberg*, September 4, 2008 available at http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aQjsXBJ4uN1Y, viewed on July 13, 2011.

100 "Broader Lessons from Lehman Brothers' Bankruptcy," Standard & Poor's, September 17, 2008, p. 5; Soros, G., "The Game Changer," *Financial Times (FT.com)*, January 29, 2009; Blinder, A., "Six Errors on the Path to the Financial Crisis," *The New York Times*, January 25, 2009, available at http://www.nytimes.com/2009/01/25/business/economy/25view html?_r=1, viewed on July 13, 2011; and Guha, K., "No Public Subsidy for Lehman Takeover," *Financial Times (FT.Com)*, September 12, 2008.

101 These mechanisms may have included an assisted transaction, conservatorship, guaranteeing debt, or conversion into a bank holding company

102 "Broader Lessons from Lehman Brothers' Bankruptcy," Standard & Poor's, September 17, 2008, p. 5; "US Government Rescues Insurer AIG," *BBC News*, September 17, 2008, available at http://newsvote.bbc.co.uk/mpapps/pagetools/print/news.bbc.co.uk/2/hi/business/7620127.stm, viewed on July 13, 2011; Scinta, C., "GM Wins Final Approval of $33 Billion Government Loan," *Bloomberg*, June 25, 2009, available at http://www.bloomberg.com/apps/news?pid=newsarchive&sid=ahDD1Cs1N5wE, viewed on July 13, 2011; "Chrysler Gets $4 Billion U.S. Government Loan," *Reuters*, January 2, 2009; Report of Anton R. Valukas, Examiner, *In re Lehman Brothers Holdings Inc. et. al., Debtors*, 08-13555 (JMP), Southern District of New York, March 11, 2010, pp. 631-632.

> *"real fact of life" and said that most attendees of the FRBNY meetings on September 12 through 14 2008 "probably assumed that [Paulson's statement that there would be no Government help] was a negotiation." Chairman Bernanke told the Examiner that he remained in Washington, D.C., during Lehman's final weekend in part because a possibility existed that Bernanke might need to convene a meeting of the Federal Reserve Board to exercise the Federal Reserve's emergency lending powers under Section 13(3) of the Federal Reserve Act."*[103]

77. Following the government-assisted acquisition of Bear Stearns in March 2008, many market participants believed the Federal Reserve would also provide financial support to Lehman. For example, after Lehman declared bankruptcy, George Soros stated that: "In the past, whenever the financial system came close to a breakdown, the authorities rode to the rescue and prevented it from going over the brink. That is what I expected in 2008 but that is not what happened."[104] Lehman and Bear Stearns were players in the same market, though Lehman was much larger. Lehman's assets were $786 billion[105] at the quarter ended February 29, 2008, while Bear Stearns' assets were almost $400 billion[106] at the quarter ended February 29, 2008. It seemed logical to assume that, "[i]f Bear was too big to fail, how could Lehman, at twice its size, not be? If Bear was too entangled to fail, why was Lehman not?"[107] The Lehman merger negotiations may also have been stalled as potential buyers held out for government assistance.[108] Even as

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103 Report of Anton R. Valukas, Examiner, *In re Lehman Brothers Holdings Inc. et. al., Debtors*, 08-13555 (JMP), Southern District of New York, March 11, 2010, pp. 617-618.

104 Soros, G., "The Game Changer," *Financial Times (FT.com)*, January 29, 2009.

105 Lehman Brothers Holdings Inc., Form 10-Q for the quarterly period ended February 29, 2008, p. 5.

106 The Bear Stearns Companies Inc., Form 10-Q for the quarterly period ended February 29, 2008, p. 5.

107 Blinder, A., "Six Errors on the Path to the Financial Crisis," *The New York Times*, January 25, 2009, available at http://www nytimes.com/2009/01/25/business/economy/25view html?_r=1, viewed on July 13, 2011.

108 Bruno, J.B., and Crutsinger, M., "Lehman's Future in Doubt, Banks Seen Unveiling Plan to Restore Confidence in Financial System," Associated Press, September 15, 2008; and Gasparino, C., "Street Prepares for Worst as Lehman Deal Stalls," *CNBC*, September 14, 2008, available at

the government remained adamant that it would not be involved in any rescue during the days leading to Lehman's bankruptcy, reports suggested that it was "possible that as negotiations proceed[ed] [the Federal Reserve and Treasury] may be pressed to take on some financial role."[109]

78. In a report published on September 17, 2008 Standard and Poor's wrote:

> *"To be sure, the government has supported financial institutions for many years in a variety of ways. The bailout last March of Bear Stearns contributed to this view, especially as the Federal Reserve Board put in place liquidity facilities for broker-dealers not invoked since the 1930s. Indeed, we factored this type of liquidity support as part of our ratings for the broker-dealers this year. By also brokering the JPMorganChase takeover of Bear Stearns to avoid the latter's collapse the government showed extreme support to limit systemic risk.*
>
> *The government provided such support again with its intervention via conservatorship of Fannie and Freddie this month. Some could argue that the GSE's conservatorship is a special case of extraordinary intervention because of the GSE's status as institutions with implicit governmental support. Still, market expectations that the government would stand by and support failing financial institutions were reinforced, thus creating moral hazard as an unintended consequence of the Bear and GSE bailouts."*[110]

79. The government's decision to allow Lehman to go bankrupt came as a surprise to the market. Federal Reserve Chairman Ben Bernanke stated that he was "never of the view that [Lehman's] failure was inevitable."[111] In the days following the bankruptcy, analysts' reports referred to Lehman's collapse as a "shock" and a "nasty surprise," citing previously held "widespread expectations that a deal on

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http://www.cnbc.com/id/26704405/Street_Prepares_for_Worst_As_Lehman_Deal_Stalls/, viewed on July 13, 2011.

109 Guha, K., "No Public Subsidy for Lehman Takeover," *Financial Times (FT.Com)*, September 12, 2008.

110 "Broader Lessons from Lehman Brothers' Bankruptcy," Standard & Poor's, September 17, 2008, p. 5.

111 Report of Anton R. Valukas, Examiner, *In re Lehman Brothers Holdings Inc. et. al., Debtors*, 08-13555 (JMP), Southern District of New York, March 11, 2010, p. 615.

Lehman would somehow be brokered."[112] It was clear that, "[c]oming just six months after Bear's rescue, the Lehman decision tossed the presumed rule book out the window"[113] Dick Fuld, Lehman's chief executive officer, indicated in a congressional hearing that he would "go to his grave wondering why the U.S. government had opted to save AIG and Bear Stearns but had judged Lehman unworthy of federal bail-out."[114] Others shared the view that allowing Lehman to fail had been "one of the biggest blunders in this whole financial crisis. Christine Lagarde, France's finance minister, called the decision 'a genuine error.'"[115]

80. As discussed in the previous sections, the market price analysis of Lehman's debt, equity, and credit default swaps reflect the market consensus that Lehman would not default on its obligations and instead would continue as a going concern, merge with another firm, or receive government assistance. These expectations were reasonably founded market beliefs at the time and based, in part, on the government-assisted acquisition of Bear Stearns. Therefore, the expectations of a possible merger or government intervention are additional reasons that support my conclusion that Lehman's bankruptcy was not reasonably foreseeable.

B. Other Sophisticated Market Investors Held Lehman Securities at the Time of Bankruptcy

81. When Lehman filed for bankruptcy, its securities were widely held by many types of investors, including investment vehicles with conservative investment mandates such as money market funds, local government investment pools, and

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112 "Investment Perspectives," Morgan Stanley, September 24, 2008, p. 6; "Bank Stocks Fail to Rally on AIG Bailout - Lehman Bankruptcy Still Reverberating; Difficult to Gauge Impact on Banks," JPMorgan, September 18, 2008, p. 1; "Shock Therapy," UniCredit, September 15, 2008, p. 1; and "2009 New Year Preview: Sector Themes for 2009," RBC Capital Markets, January 2009, p. 56.

113 Blinder, A., "Six Errors on the Path to the Financial Crisis," *The New York Times*, January 25, 2009, available at http://www nytimes.com/2009/01/25/business/economy/25view html?_r=1, viewed on July 13, 2011.

114 "Keynes, Libor, Leverage," *Financial Times (FT.com)*, December 30, 2008.

115 Sorkin, A.R., "How the Fed Reached Out to Lehman," *The New York Times*, December 16, 2008.

pension funds. For example, the Reserve Primary Fund, one of the oldest and largest money market funds, held $785 million in Lehman-issued commercial paper. After Lehman's bankruptcy filing, the net asset value of the Reserve Primary Fund dropped below $1 per share, and the Reserve Primary Fund became the first retail money market fund to "break the buck."[116] Sponsors of other money market funds entered into support agreements to prevent the net asset values of their funds from similarly falling below one dollar per share: "Other fund families, including Wachovia's Evergreen Funds, Northwestern Mutual's Russell Funds, Riversource Investments, and Columbia Management, took similar actions [to support their money market funds] due to holdings of Lehman debt."[117]

82. Government investment pools also held Lehman securities at the time of bankruptcy and experienced substantial losses on these investments. For example, "Florida public agencies lost a total of more than $400 million, mostly from a state investment pool. California municipalities lost a total of $250 million across some 28 cities and counties.[118] Securities lending programs, including Bank of New York Mellon, Wells Fargo, Northern Trust, and JPMorgan Chase, also held Lehman-issued securities at the time that Lehman declared bankruptcy.[119] In light

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116 Waggoner, J., "Reserve Primary Money Market Fund Breaks A Buck," *USA Today*, updated September 17, 2008, available at http://www.usatoday.com/money/perfi/basics/2008-09-16-damage_N.htm, viewed on July 13, 2011.

117 "Report of the Money Market Working Group," Investment Company Institute, March 17, 2009, p. 62; See also, Gullapalli, D., Anand, S., and Maxey, D., "Money Fund, Hurt by Debt Tied to Lehman, Breaks the Buck," *The Wall Street Journal*, September 17, 2008; and Condon, C., "Reserve Money Fund Falls Below $1, Delays Withdrawals," Bloomberg, September 17, 2008, available at http://www.bloomberg.com/apps/news?pid=21070001&sid=aZQNfHdzabDY, viewed on July 13, 2011.

118 Carreyrou, J., "Lehman's Ghost Haunts California," *The Wall Street Journal*, February 24, 2010.

119 See, for example, Second Amended Class Action Complaint, *IBEW vs. Bank of New York Mellon, N.A.*, Civil Action No. 09-cv-06273 (RMB)(AJP), Southern District of New York, December 17, 2009; Class Action Complaint, *Board of Trustees of the Imperial County Employees' Retirement System et al. v. JPMorgan Chase Bank, N.A.*, 1:09-cv-03020-UA, Southern District of New York, March 27, 2009; Amended Complaint and Jury Demand, *Copic Insurance Company v. Wells Fargo & Company et al.*, 1:09-cv-00041-WDM-BNB, District of Colorado, February 20, 2009; and "Northern Trust Global Securities Lending Presentation (October 2008)," Exhibit 18 to

of the economic conditions facing both Lehman and the economy at this time, many sophisticated investors apparently agreed that Lehman investments continued to comply with their conservative investment profile and maintained positions in Lehman securities through the bankruptcy filing. If Lehman's bankruptcy filing had been reasonably foreseeable, one would not expect to observe the quantity of sophisticated investors with conservative mandates continuing to hold Lehman securities. The fact that so many conservative investors continued to hold Lehman's securities at this time buttresses my opinion that Lehman's bankruptcy was not reasonably foreseeable.

83. Additionally, Pacific Investment Management Company ("PIMCO"), one of the largest and most respected fixed income managers, continued to add to its Lehman positions throughout the first half of 2008.[120] "Underlying the Lehman bet was [William Gross, co-founder and Total Return Fund manager's] belief, articulated in a July 2008 appearance on CNBC-TV and shared by many others, that there was 'close to 100% probability' that Lehman would avoid failure."[121]

84. Furthermore, Lehman's securities were not only held by sophisticated market investors, Lehman's stock was part of the S&P 500 *and* S&P 100 indices through all of 2007 and up to its bankruptcy.[122] S&P defines the S&P 100 as consisting "of 100 companies selected from the S&P 500. To be included, the companies

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Plaintiffs' Proposed Findings of Fact and Conclusions of Laws, *BP Corporation North America Inc. Savings Plan Investment Oversight Committee et al. v. Northern Trust Investments N.A. and the Northern Trust Company*, 1:08-cv-06029, Northern District of Illinois, December 4, 2008.

120 Morath, E., "Pimco Paid Hefty Prices for Lehman Debt as Collapse Neared," The Wall Street Journal, May 16, 2011, available at http://online.wsj.com/article/SB10001424052748703509104576327440394557176 html, viewed on August 23, 2011; and Spector, M., Pilon, M., and McGinty, T., "Pimco Takes Bath on Lehman," The Wall Street Journal, June 7, 2011, available at http://online.wsj.com/article/SB10001424052702304563104576361742449372266 html, viewd on August 23, 2011.

121 Spector, M., Pilon, M., and McGinty, T., "Pimco Takes Bath on Lehman," The Wall Street Journal, June 7, 2011, available at http://online.wsj.com/article/SB100014240527023045631045776361742449372266.html, viewd on August 23, 2011.

122 It was not until Lehman filed for bankruptcy on September 15, 2008 that S&P dropped Lehman from its S&P 500 and S&P 100 indices. See "S&P 500 to Drop Lehman Brothers, Add Harris," Reuters, September 15, 2008.

should be among the larger and more stable companies in the S&P500."[123] Among the criteria for inclusion in the indices are adequate liquidity and financial viability.[124]

85. Finally, the after-effects of Lehman's collapse are also a clear indication of how unforeseen its demise was. Worldwide, many sophisticated investors such as banks, insurers, investment advisors, pension plans, financial institutions, and hedge funds suffered massive losses tied to the collapse of Lehman.[125]

86. Sophisticated investors from all over the world were making their investment decisions by relying on publicly available information just as Wachovia's securities lending program did. It would be irrational for investors to continue holding long positions in Lehman securities if Lehman's bankruptcy had been reasonably foreseeable. Therefore, the fact that many other sophisticated investors continued to hold Lehman investments until Lehman declared bankruptcy further supports my conclusion that Lehman's bankruptcy was not reasonably foreseeable. If Lehman's bankruptcy had been foreseeable, these sophisticated investors with substantial sums at risk would have sold their Lehman investments rather than continue to hold onto their investments until bankruptcy.

VII. Lehman's Collapse Is Consistent with the "Run on the Bank" Phenomenon

87. Following Lehman's bankruptcy filing, S&P published a report assessing the

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123 "S&P U.S. Indices, Index Methodology," Standard & Poor's, August 2009, p. 3.

124 "S&P U.S. Indices, Index Methodology," Standard & Poor's, August 2009, pp. 5-6.

125 See, for example, Ivry, B., Pittman, M., and Harper, C., "Sleep-At-Night-Money Lost in Lehman Lesson Missing $63 Billion," Bloomberg, September 8, 2009, available at http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aLhi.S5xkemY, viewed on July 13, 2011; Thomas, L. Jr., "Big Hedge Funds Chasing Assets Held by Lehman," *International Herald Tribune*, October 2, 2008; Duncan, G., "Lehman Collapse Sends Shockwave Round World," *The Times (UK)*, September 16, 2008; Smith, M., "$: Bill to Taxpayer of Bailout," *The Herald*, September 14, 2009; and "Broader Lessons from Lehman Brothers' Bankruptcy," Standard & Poor's, September 17, 2008, p. 3.

cause of the bankruptcy. The report stated that "facing a likely complete collapse in confidence on the part of creditors, counterparties, and customers when it opened for business on Monday, Sept. 15, Lehman Brothers Holdings Inc. filed for Chapter 11 bankruptcy protection."[126] The report also stated: "In conclusion, we believe the downfall of Lehman reflected escalating fears that led to a loss of confidence—ultimately becoming a real threat to Lehman's viability in a way that fundamental credit analysis could not have anticipated."[127]

88. Such a "complete collapse in confidence" is consistent with the "run on the bank" phenomenon. In a run on the bank, the collapse of the institution is rapid and unforeseen. Commercial banks fund themselves with short-term deposits and use those deposits to issue mortgages and other long-term loans. A run on the bank is defined as a "demand for their money by many depositors all at once... Such a run is caused by a breach of confidence in the bank."[128] If a bank does not have enough cash to satisfy these demands, the bank may be rendered insolvent.

89. This "run on the bank" phenomenon is not unique to commercial banks. A run on the bank may occur at other institutions that fund themselves with short-term financing and invest in longer term assets. Like many other "shadow banks" at the time, Lehman funded itself with short-term borrowings and used those borrowings to make long-term investments.[129] Specifically, a substantial portion of Lehman's funding came from commercial paper and repurchase transactions which have short-term maturities, usually of less than a year.[130] This maturity

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126 "Why Was Lehman Brothers Rated 'A'?," Standard & Poor's, September 24, 2008, p. 5.

127 "Why Was Lehman Brothers Rated 'A'?," Standard & Poor's, September 24, 2008, p. 5.

128 Downes, J., and Goodman, J.E., *Dictionary of Finance and Investment Terms (Barron's Financial Guides)*, Seventh Edition, Barron's Educational Series, 2006, p. 603.

129 Financial institutions which do not accept deposits and are not regulated by the Federal Reserve, like Lehman, have come to be called "shadow banks." Investment banks, mutual funds, hedge funds, finance companies, pension funds, and insurance companies are all part of the "shadow" banking system. See Hubbard, R.G., and O'Brien, A.P., *Money, Banking, and the Financial System*, First Edition, Pearson Prentice Hall, 2011, Chapters 10 and 11.

130 Hubbard, R.G., and O'Brien, A.P., *Money, Banking, and the Financial System*, First Edition, Pearson Prentice Hall, 2011, Chapters 10 and 11.

mismatch between Lehman's assets and liabilities created the potential for a run on the bank. For example, if Lehman were unable to roll over most of its overnight repurchase agreements and commercial paper, it would face a liquidity crunch similar to the one experienced by commercial banks during a run on the bank.

90. Bank runs are a topic of ongoing research in the fields of finance and economics.[131] Though many theories have been proposed, there is no established and reliable method of predicting bank runs. Nevertheless, as described earlier, financial institutions with asset-liability maturity mismatches are vulnerable to bank runs. The incentive to withdraw one's funds is created by the belief that others will withdraw their funds first.[132] In other words, a bank run is triggered by the belief that there will be a bank run. By the time creditors believe that there will be a bank run, the run has already started, and it is, generally, too late to prevent or avoid. Clearly, when bank runs occur, they arise very quickly and without warning.[133] The precipitous collapse of Lehman Brothers on September 15, 2008 was consistent with a run on the bank, which is not reasonably foreseeable.

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131 See Starr, M.A., and Yilmaz, R., "Bank Runs in Emerging Market Economies: Evidence From Turkey's Special Finance Houses," *Southern Economic Journal*, 73(4), April 2007: 1112-1132; See also Schotter, A., and Yorulmazer, T., "On the Dynamics and Severity of Bank Runs: An Experimental Study," *Journal of Financial Mediation*, 18 (2009): 217-241.

132 For example, U.S. Treasury Secretary Timothy Geithner described the freezing of the credit markets as a "run" on the entities of the shadow banking system. See Geithner, T.F., "Causes of the Financial Crisis and the Case for Reform," Testimony Before the Financial Crisis Inquiry Commission, May 6, 2010.

133 For a discussion of the run-on-the-bank phenomenon, see, for example, DeAngelo, H., DeAngelo, L., and Gilson, S. C., "The Collapse of First Executive Corporation: Junk Bonds, Adverse Publicity, and the 'Run on the Bank' Phenomenon," *Journal of Financial Economics*, 36 (March 1994): 287-336.

VIII. The Freed Report Mischaracterizes the Evidence on Lehman, Drawing the Erroneous Conclusion that There Were Unmistakable Warnings in the Market

91. The Freed Report claims that there were "unmistakable warnings in the market place [sic] and the financial press that Lehman Brothers was facing severe and critical problems."[134] It also contends that "by August 2008, at the latest, Wachovia knew or should have known that investments in Lehman had become too risky for St. Petersburg's securities lending portfolio."[135] To support these claims, the Freed Report includes a "summary narrative of the financial history of Lehman" that reviews market events leading up to Lehman's bankruptcy.[136]

92. The financial history of Lehman contained in the Freed Report is selective and conceptually problematic. First, the Freed Report's review of market events is contradicted by market prices, which, in an efficient market, incorporate all available public information. Second, the Freed Report's review of market events is not representative of all of the information available in news articles and analysts' reports during this time period (economically speaking, the sample in the Freed Report suffers from selection bias). Third, closer examination of the sources cited in the Freed Report indicates that much of the information used as support is either mischaracterized or contradicted in the same article that is cited. Because of these issues, the Freed Report presents a biased and misleading summary of market information concerning Lehman that overstates investor concerns during the year preceding the bankruptcy filing.

A. The Freed Report's Financial History of Lehman Is Not Supported by Market Prices

93. As discussed earlier in my Report, in an efficient market, bond prices reflect

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134 Freed Report, p. 7.

135 Freed Report, p. 11.

136 Freed Report, p. 7-11.

rational investors' beliefs about the issuer's ability to repay its outstanding debts.[137] The Freed Report's analysis of news articles and analysts' reports regarding Lehman selectively states investor concerns and does not comport with the market sentiment reflected by bond prices. As the risk of a company's default increases, the prices of the company's bonds usually decline. More specifically, if the market events listed in the Freed Report truly indicated to professional money managers such as Wachovia that Lehman's "severe and critical problems" were significant enough to affect Lehman's ability to pay its debts, then this indication would have been reflected in the prices of Lehman bonds.[138] If the Lehman bankruptcy had been reasonably foreseeable, the price of its corporate debt should have fallen dramatically in the months preceding the bankruptcy filing. However, as I discuss in Section IV, the price of Lehman's debt did not experience such a precipitous decline, and the price of Lehman's debt did not trade at a similar level to that of other firms that did eventually declare bankruptcy.[139] In fact, even subordinated Lehman bonds traded above 85 cents on the dollar in the week prior to the bankruptcy filing.[140]

B. The Selection Bias in the Articles Cited in the Freed Report Undermines Its Conclusions

94. Selection bias occurs when the sample drawn for observation or inferences is systematically distorted.[141] The effect of selection bias is to render inferences drawn from the biased samples essentially meaningless.[142] The Freed Report's financial history of Lehman does not cite a representative sample of news reports

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137 Fabozzi, F. J., *The Handbook of Fixed Income Securities,* Seventh Edition, 2005, pp. 80-81.

138 Freed Report, p. 7.

139 See ¶26.

140 See ¶26.

141 Heckman, J. J., "Sample Selection Bias as a Specification Error," *Econometrica*, Volume 47, No. 1, January 1979, pp. 153-161 at p. 153.

142 "Ethical and Professional Standards and Quantitative Methods," CFA Program Level 1 Curriculum, Volume 1, 2010, p. 496.

from the time period and suffers from selection bias. Beyond the cherry-picked examples cited in the Freed Report, there are several contemporaneous analysts' reports and other materials that render its conclusion meaningless. In this section, I provide some examples to outline the extent of the Freed Report's omissions.

95. To support its claims, the Freed Report excerpts comments from fixed income analysts' reports.[143] However, the Freed Report fails to mention any equity analysts' reports regarding Lehman, and in doing so, the Freed Report omits a large number of analysts' reports that recommended buying Lehman and included favorable comments about the firm's fundamentals.[144]

96. As I discussed earlier in my report, at least 90 percent of analysts surveyed by Thomson IBES who followed Lehman during the period from July 1, 2007 to September 12, 2008 had a buy or hold recommendation for Lehman's stock.[145] Furthermore, in August and September 2008 the percentage of analysts recommending buy or hold for Lehman was greater than the percentage of analysts recommending buy or hold for Goldman Sachs or Merrill Lynch, neither of which filed for bankruptcy.[146]

97. Moreover, while the Freed Report cites two reports that discuss Bear Stearns and Lehman, it fails to cite any analysts' reports issued after the government-assisted

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143 Freed Report, pp. 9-10.

144 It is important to note that equity holders in a firm represent a "residual claim" on the assets and income of the firm. That is, equity holders have claim to what is left over after employees, suppliers, bondholders, and other creditors have been paid during liquidiation. See, for example, Bodie, Z., Kane, A., and Marcus, A. J., *Investments*, Seventh Edition, 2008, p. 39. Given that a bondholder's claim is higher in priority than an equity claim, positive statements or projections regarding Lehman's equity implicitly represent a positive outlook for the repayment of Lehman's debt.

145 According to Thomson, its Thomson IBES analyst research collection is the most comprehensive database of analysts' reports. It contains research from more than 1,400 analyst sources around the globe including Morgan Stanley, JPMorgan, Credit Suisse, Deutsche Bank, ABN AMRO, CA Cheuvreux, Jefferies & Company, CIBC World Markets, RBC Capital Markets, Société Générale, HSBC Global Research, BNP Paribas Securities, Macquarie, and Wachovia. ("Analyst Research," ThomsonOne, available at http://thomsonreuters.com/content/financial/pdf/i_and_a/thomsononecom_ib_research.pdf, viewed on February 15, 2011.)

146 See ¶64 and Exhibit 27.

acquisition of Bear Stearns which stated that the Lehman and Bear Stearns situations were not the same.[147] Regarding the differences between these two firms, several analysts pointed to Lehman's international diversification, strong execution track record, and seasoned management.[148] Additionally, immediately following the government-assisted acquisition of Bear Stearns, the Buckingham Research Group maintained its "Strong Buy" rating for Lehman while Wachovia acknowledged that, despite Lehman's significant mortgage exposures, Lehman "is a better firm than the market continues to give it credit for."[149] A Morgan Stanley report issued in June 2008 conceded downside risk potential stemming from balance sheet overhang, the possibility of franchise erosion, and longer term revenue replacement concerns. The report, however, concluded that "comparisons to Bear do not hold up, particularly in the wake of the Fed's aggressive action in the wake of Bear's collapse."[150]

98. Also, the Freed Report notes that Lehman announced losses for the second quarter of 2008,[151] but it fails to mention that many research analysts remained optimistic regarding Lehman's prospects throughout the summer of 2008. As I illustrated earlier in my report, during this time period equity analysts noted Lehman's strength in revenue, solid capital footing, lowered exposure to risk, and increased diversification.[152] For example, a Morgan Stanley analyst's report stated, "[w]e

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147 Freed Report, pp. 9-10. I review these reports and discuss the Freed Report's mischaracterization of them in ¶¶105-107.

148 See ¶67.

149 "1Q08: Underlying Earnings Power Remains Intact," The Buckingham Research Group, March 19, 2008, p. 1; and "LEH: Lehman Defies Skeptics…Again – Lowering Est.," Wachovia, March 19, 2008, p. 1.

150 "Lehman Brothers: Bruised, Not Broken – and Poised for Profitability," Morgan Stanley, June 30, 2008, p. 8.

151 Freed Report, p. 10.

152 While acknowledging Lehman's negative results in Q2 2008 and the downside risks to the firm, these reports also discussed positive takeaways and upside potential which ultimately led them to place confidence in the firm's prospects going forward. See, "Greater Than Expected Loss, But More Than in the Stock," The Buckingham Research Group, June 9, 2008, p. 2; "2Q08: Risks Are

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think LEH has adequate capital and liquidity to withstand [severe] write-downs and sufficient earnings power to generate low-double-digit ROE. A return to profitability in the context of reduced balance sheet overhang should help unlock valuation upside."[153]

99. Finally, the Freed Report fails to note that as late as September 10, 2008, just days before Lehman's bankruptcy filing, many analysts did not have a sell recommendation for Lehman. Credit Suisse and JPMorgan rated Lehman "Neutral," and Fox-Pitt rated it "Outperform," stating that the "franchise does not appear to have been impacted by the negative headlines and weak stock performance."[154] The following day, analysts continued to assign Lehman ratings of "Outperform," "Buy," "Hold," "Market Perform," "Neutral," and "Underweight."[155]

100. Based on my review of the sources cited in the Freed Report, as well as numerous additional equity reports filed between July 1, 2007 and September 15, 2008, the sources that the Freed Report presents appear to be an unrepresentative sample that mischaracterizes the analysts' opinions and overlooks valuable information.

Coming Down; Reaffirm S. Buy," The Buckingham Research Group, June 17, 2008, pp. 1, 3, and 4; and "Plausible Downside on Fundamentals Is Priced In," Morgan Stanley, July 24, 2008, p. 1.

153 "Plausible Downside on Fundamentals Is Priced In," Morgan Stanley, July 24, 2008, p. 1.

154 "Starting the Clean Up: Follow Through Critical," Credit Suisse, September 10, 2008, p. 1; "Management Has Plan, Not Action – We Await Inv. Mgmt Sale," JPMorgan, September 10, 2008, p. 1; and "LEH 3Q08: Core Results As Expected, Dispositions Bigger," Fox-Pitt Kelton Cochran Caronia Waller, September 10, 2008, p. 1.

155 "LEH: A Great Restructuring Plan, But Will the Markets Get It?," Fox-Pitt Kelton Cochran Caronia Waller, September 11, 2008, p. 1; "Lehman's Non-Strategy," Ladenburg Thalmann, September 11, 2008, p. 1; "Downgrade from Buy to Hold on Rating Agency Reports," Deutsche Bank, September 11, 2008, p. 1; "LEH: Pre-Announces and Highlights Initiatives—Adjusting Ests," Wachovia Capital Markets, LLC, September 11, 2008, p. 1; "Rating Agency Risk Too High," The Buckingham Research Group, September 11, 2008, p. 1; and "De-risking and Depending on Markets to Hold," HSBC Global Research, September 11, 2008, p. 1.

C. The Freed Report's Financial History of Lehman Mischaracterizes Quotations from News Articles and Analysts' Reports

101. The Freed Report claims that "the fate of Lehman had been foreshadowed by the collapse of the Bear Sterns hedge funds…"[156] In its financial history of Lehman, the Freed Report cites several sources meant to link Lehman to Bear Stearns with regard to investment risk and ultimate prospects for survival. The excerpts that the Freed Report draws upon for support are often presented out of context. In several instances, the Freed Report presents quotations from sources that also contain comments that contradict the intended point of the Freed Report, including positive statements regarding Lehman's future outlook and ability to manage through the credit crisis.

102. For example, the Freed Report cites a March 15, 2008 *Wall Street Journal* article that asserts that Lehman was "Bear's closest cousin on Wall Street."[157] However, the same article also states, "[l]ike Bear, Lehman is a big bond player and also one of the smaller Wall Street firms. But it is on sturdier ground than Bear, many investors said. 'I'm pretty comfortable with Lehman's liquidity,' said [Michael Peterson, director of research at Pzena Investment Management], whose firm owns Lehman shares. 'The lessons of 1998 were not at all lost on Lehman.'"[158] The author of the article also recognizes that Lehman's liquidity access was much stronger than Bear's, stating, "[i]n a crunch, Lehman may be able to raise cash by selling another big pool of liquid assets, which is valued at more than $60 billion. Adding that to the liquidity cash reserve gives Lehman a potential $100 billion cash pile, equal to 54% of collateralized financing. That is ahead of some other brokers and far stronger than Bear's 31%."[159] The article also notes that Lehman

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156 Freed Report, p. 7.

157 Freed Report, p. 9.

158 Eaves, P., and Reilly, D., "Heard on the Street," *Wall Street Journal*, March 15, 2008.

159 Eaves, P., and Reilly, D., "Heard on the Street," *Wall Street Journal*, March 15, 2008.

was less reliant on short-term borrowing than it was in 1998.[160] These points are simply omitted from the Freed Report.

103. The Freed Report cites another *Wall Street Journal* article from March 18, 2008 that states that Lehman "also makes relatively high use of the same short-term debt obligation known as repos, which turned out to be Bear Stearns's Achilles heel."[161] However, the Freed Report disregards the section of the article which reports positive developments regarding Lehman's stock and CDS prices: "[b]y midday shares in Lehman had risen 40%, while Goldman, which has fared relatively well over the past year, climbed 13%. Meanwhile, credit-protection costs for both firms, which have become a proxy measure of traders' nerves about banks' liquidity, declined. The glow of the earnings helped lighten suspicions of other firms that some investors feared would follow in Bear's footsteps."[162]

104. The Freed Report also cites an April 1, 2008 *Wall Street Journal* article which references a Bank of America analyst's report stating mortgages represented 29% of Lehman's total assets.[163] Again, the Freed Report ignores the positive statements regarding Lehman's outlook in the same article. The article notes, "[Lehman] says it has enough cash on hand to weather the current crisis, $31 billion in cash and cash equivalents and another $65 billion in assets it can easily borrow against. Furthermore, thanks to a recent change in the rules, it now has access for the first time to Federal Reserve funds, a move that gives Lehman access to an essentially unlimited pool of money at the same rate as commercial banks."[164]

105. The Freed Report continues to mischaracterize analysts' findings by citing portions of a June 5, 2008 JPMorgan Short-Term Fixed Income research report.

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160 Eaves, P., and Reilly, D., "Heard on the Street," *Wall Street Journal*, March 15, 2008.

161 Freed Report, p. 9.

162 Moroney, Robin, "No News, Good News," *Wall Street Journal*, March 18, 2008.

163 Freed Report, p. 9.

164 Craig, S., "Lehman Wants to Short-Circuit Short Sellers," *Wall Street Journal*, April 1, 2008.

The Freed Report references the research report's discussion of the concerns of certain investors changing their willingness to fund Lehman in the light of potential future ratings downgrades.[165] However, the Freed Report overlooks the the JPMorgan analysts' opinion that a ratings downgrade would not necessarily be life threatening to Lehman:

> *[For both Lehman and Merrill Lynch] the issuers would continue to qualify as First Tier securities under 2a-7 since at least two NRSROs continue to rate these firms in the agencies respective highest short-term rating categories. In fact, both MER and LEH each currently carry short-term ratings from four NRSROs (S&P, Moody's, Fitch and DBRS), and so would have to be downgraded to the second highest rating category by three of the four before they were considered Second Tier under rule 2a-7. Many prime funds take some or all of their broker exposure in the form of repurchase agreements (repo) which do not necessarily count for purposes of calculating issuer concentrations. Rule 2a-7's portfolio diversification standards permit a fund to "look-through" a repo to the underlying collateral and disregard the counterparty in determining compliance with the rule. In effect, this means even if one or more of these brokers were downgraded to Second Tier access to the repo market and the funding it provides could continue. Whether it actually would continue is a different story.*[166]

106. The same report also notes that Lehman has access to federal funding for emergency backstop funding as well as other alternative sources of funding.[167] These details led the JPMorgan analyst to conclude that "the combination of these factors partly mitigate the risks of a major insolvency event like that suffered by Bear Stearns,"[168] and that "[i]n the end, S&P's rating actions this week will impact how liquidity investors view the affected firms, but at this time we do not think

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165 Freed Report, pp. 9-10.

166 Roever, A., JPMorgan Short-Term Fixed Income Research Note, June 5, 2008, p. 2. WACH-STPETE 165534 – 165538 (Deposition Exhibit 40) at 165535.

167 Roever, A., JPMorgan Short-Term Fixed Income Research Note, June 5, 2008, p. 3. WACH-STPETE 165534 – 165538 (Deposition Exhibit 40) at 165536.

168 Roever, A., JPMorgan Short-Term Fixed Income Research Note, June 5, 2008, p. 3. WACH-STPETE 165534 – 165538 (Deposition Exhibit 40) at 165536.

these moves are likely to spark a funding crisis for either [Merrill Lynch] or [Lehman]."[169] The Freed Report omits any mention of these observations.

107. The Freed Report also cites a July 11, 2008 Wachovia analyst's report, noting, "concerns regarding the possibility of a Bear Stearns-like liquidity run at Lehman Brothers have weighed on its spreads over the past few weeks."[170] The Freed Report ignores the two sentences which immediately follow. In these sentences, the Wachovia analysts acknowledge, "However, the response has been more muted than it arguably might have been otherwise due to LEH's access to the Fed window. Whereas BSC's five-year CDS surged to more than 700 bps over prior to its demise, LEH's five-year CDS is currently trading at 304 bps over as, in our opinion, access to the Fed window would give LEH time to engineer a sale versus undergoing a Bear Stearns-style capitulation."[171]

108. Finally, the Freed Report notes that Moody's downgraded Lehman's short term rating from A1 to A2 on July 17, 2008.[172] However, the Freed Report does not acknowledge Moody's positive remarks regarding Lehman: "Lehman has been proactive in its efforts at bolstering capital and de-leveraging its balance sheet. Moody's said that over the past two quarters Lehman has made significant progress reducing its exposures to commercial and residential real estate."[173] Moody's also noted that the $6 billion in capital Lehman raised in June left Lehman "well positioned to absorb potential valuation marks that are within Moody's stress-case expectations."[174]

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169 Roever, A., JPMorgan Short-Term Fixed Income Research Note, June 5, 2008, p. 4. WACH-STPETE 165534 – 165538 (Deposition Exhibit 40) at 165537.

170 Freed Report, p. 10.

171 Burnell, M., and Strecker, J., Wachovia Fixed Income Research, July 11, 2008, p. 2. WACH-STPETE 089670 - 089709 (Deposition Exhibit 45) at 086372.

172 Freed Report, p. 10.

173 "Rating Action: Moody's lowers Lehman Brothers rating to A2; outlook negative," Moody's Investors Service, July 17, 2008.

174 "Rating Action: Moody's lowers Lehman Brothers rating to A2; outlook negative," Moody's Investors Service, July 17, 2008.

109. To summarize, the Freed Report's financial history of Lehman is misleading and mischaracterizes the positions of the authors that it cites. Not only does the Freed Report fail to investigate market indicators such as bond prices and CDS spreads, it also fails to report a representative selection of information. It ignores positive remarks made regarding Lehman in the same sources that it cites, and it presents a biased and distorted view of market sentiment in the time period leading up to Lehman's bankruptcy.

Signed: R Glenn Hubbard

Robert Glenn Hubbard
August 24, 2011

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Exhibit 1
Lehman's 25 Largest U.S. Dollar Debt Issuances at Time of Default

CUSIP [1]	Seniority	Issue Date	Years to Maturity from Issuance	Maturity Date	Coupon	Coupon Rate	Issued Amount ($ millions)	Notes
5252M0BZ9	Senior Unsecured	1/22/2008	5.0	1/24/2013	Fixed Rate	5.625%	$ 4,000	
52517P2K6	Senior Unsecured	5/25/2007	3.0	5/25/2010	Variable	LIBOR 3M + 14 bp	2,750	
5252M0FD4	Senior Unsecured	4/24/2008	10.0	5/2/2018	Fixed Rate	6.875%	2,500	
52517P5X5	Senior Unsecured	9/26/2007	7.0	9/26/2014	Fixed Rate	6.200%	2,250	
524908R36	Junior Subordinated	7/19/2007	10.0	7/19/2017	Fixed Rate	6.500%	2,000	[2]
5249087N4	Subordinated	5/9/2008	30.0	5/11/2038	Fixed Rate	7.500%	2,000	[2]
52517PW31	Senior Unsecured	3/23/2007	2.0	3/23/2009	Variable	LIBOR 3M + 7 bp	1,600	
52517PSC6	Senior Unsecured	1/10/2002	10.0	1/18/2012	Fixed Rate	6.625%	1,500	
52517PR78	Senior Unsecured	1/12/2007	5.0	1/12/2012	Variable	LIBOR 3M + 23 bp	1,500	
52517PR60	Senior Unsecured	1/12/2007	5.1	2/6/2012	Fixed Rate	5.250%	1,500	
52517P4C2	Senior Unsecured	7/19/2007	5.0	7/19/2012	Fixed Rate	6.000%	1,500	
524908R44	Subordinated	7/19/2007	30.0	7/17/2037	Fixed Rate	6.875%	1,500	[2]
5249087M6	Subordinated	12/21/2007	10.0	12/28/2017	Fixed Rate	6.750%	1,500	[2]
52517PN98	Senior Unsecured	11/16/2006	3.0	11/16/2009	Variable	LIBOR 3M + 10 bp	1,350	
524908UB4	Subordinated	10/24/2006	10.2	1/3/2017	Fixed Rate	5.750%	1,250	[2]
52517PVV0	Senior Unsecured	2/25/2004	10.0	3/13/2014	Fixed Rate	4.800%	1,150	
524908W97	Senior Unsecured	9/27/2007	2.0	9/25/2009	Variable	LIBOR 3M + 16 bp	1,135	[2] [3] [4]
52517PYN5	Senior Unsecured	1/11/2005	5.0	1/27/2010	Fixed Rate	4.250%	1,100	
524908CM0	Senior Unsecured	8/15/2000	10.0	8/15/2010	Fixed Rate	7.875%	1,000	
52517PA35	Senior Unsecured	7/13/2005	5.0	7/26/2010	Fixed Rate	4.500%	1,000	
52517PF63	Senior Unsecured	3/29/2006	10.0	4/4/2016	Fixed Rate	5.500%	1,000	
52517PG21	Senior Unsecured	4/3/2006	3.0	4/3/2009	Variable	LIBOR 3M + 9 bp	1,000	
52517PQ46	Senior Unsecured	12/21/2006	2.0	12/23/2008	Variable	LIBOR 3M + 5 bp	1,000	
52517P5Y3	Senior Unsecured	9/26/2007	20.0	9/27/2027	Fixed Rate	7.000%	1,000	
52517PD65	Senior Unsecured	12/21/2005	5.0	12/23/2010	Variable	LIBOR 3M + 21 bp	975	
						Total	$ 39,060	
						Total long-term borrowings as of 5/31/2008	128,182	
						Percent contained in this sample	30%	

Notes:
[1] Zero-coupon securities were issued at a discount to par value and are excluded from this sample.
[2] CUSIPs 524908R36, 5249087N4, 5249087M6, 524908R44, 524908UB4, and 524908W97 were identified as callable securities.
[3] No price data is available for CUSIP 524908W97.
[4] Spread to benchmark interest rate increased annually. The coupon rate shown applies to the first year after the issuance date.

Sources:
[1] Bloomberg L.P.
[2] Lehman Brothers Holdings Inc., Form 10-Q for the quarterly period ended May 31, 2008.
[3] Pricing Supplements to the Prospectuses for CUSIPs 52517P2K6, 52517PW31, 52517PR78, 52517PN98, 52517PVV0, 524908W97, 52517PG21, 52517PQ46, and 52517PD65.

Exhibit 2
Lehman Debt Issuances

Lehman At-Issue Note

CUSIP	Seniority	Issue Date	Years to Maturity from Issuance	Maturity Date	Coupon Rate	Issued Amount ($ millions)	Notes
52517PW56	Senior Unsecured	3/23/2007	2.0	3/23/2009	Fed Funds (Open) + 16 bp	650	[1]

Comparable Lehman Notes

CUSIP	Seniority	Issue Date	Years to Maturity from Issuance	Maturity Date	Coupon Rate	Issued Amount ($ millions)	Notes
52517PE23	Senior Unsecured	1/25/2006	3.0	1/23/2009	LIBOR 3M + 9 bp	500	[2]
52517PG21	Senior Unsecured	4/3/2006	3.0	4/3/2009	LIBOR 3M + 9 bp	1,000	[2] [3]
52517PQ46	Senior Unsecured	12/21/2006	2.0	12/23/2008	LIBOR 3M + 5 bp	1,000	[2] [3]
52517PW31	Senior Unsecured	3/23/2007	2.0	3/23/2009	LIBOR 3M + 7 bp	1,600	[2] [3]

Notes:

[1] The Lehman At-Issue Note is identified in the Written Report of Laurence Freed, dated July 27, 2011.

[2] Because the Lehman At-Issue Note has limited TRACE pricing data, I used a set of comparable Lehman notes to impute the price of the Lehman At-Issue Note. I selected comparable notes that (1) are senior unsecured, (2) have a maturity date between and including December 23, 2008 and June 23, 2009 (i.e., three months before and after the Lehman At-Issue Note's maturity date), (3) are not subject to an early redemption option, (4) have a coupon rate benchmarked to an interest rate index, and (5) have TRACE prices for at least 50 days in the period between January 1, 2007 and September 15, 2008.

[3] These issuances are also included in the largest 25 Lehman Brothers U.S. dollar debt issuances. See Exhibit 1 for comparison.

Source:

[1] Bloomberg L.P.

[2] Lehman Brothers Holdings Inc., Form 424(b)(3), October 19, 2005.

[3] Lehman Brothers Holdings Inc., Form 424(b)(3), August 23, 2006.

[4] Lehman Brothers Holdings Inc., Form 424(b)(3), December 18, 2006.

[5] Lehman Brothers Holdings Inc., Form 424(b)(3), January 20, 2006.

[6] Lehman Brothers Holdings Inc., Form 424(b)(2), March 20, 2007.

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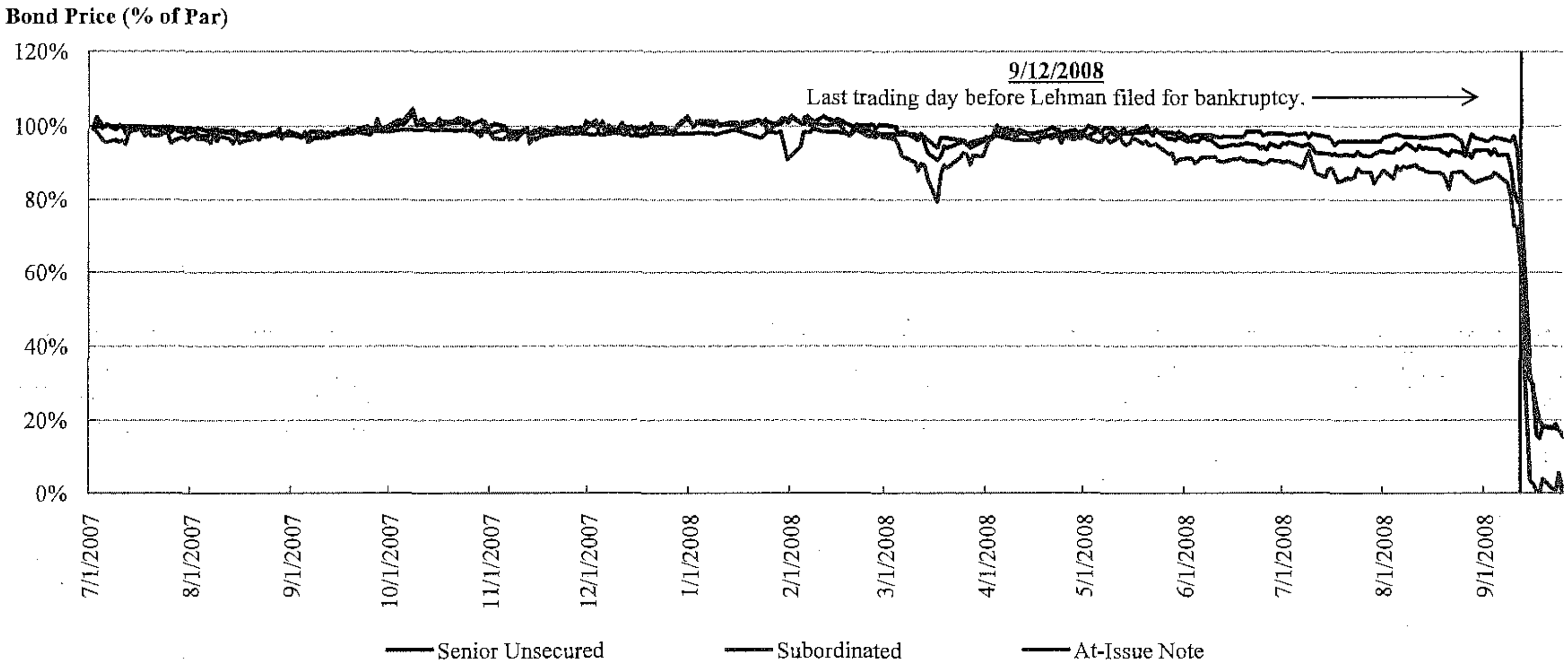
Exhibit 3
Weighted-Average Prices for Lehman's 25 Largest U.S. Dollar Debt Issuances by Seniority
July 1, 2007 - September 30, 2008



Notes:
[1] Weighted-average prices for Lehman's 25 largest U.S. dollar debt issuances are computed daily. The average is weighted by the issuance amount of each bond issue. Bonds are weighted and graphed only on the dates for which pricing information is present.
[2] The subordinated bonds include one CUSIP (524908R36) classified as junior subordinated.
[3] Lehman's 25 largest U.S. dollar debt issuances are as of the time of default. See Exhibit 1 for a description of these issuances.
[4] See Exhibit 2 for a description of the Lehman At-Issue Note.
[5] Prices close to par value after Lehman's bankruptcy were removed. According to trade reports posted by FINRA, these prices represent cancelled trades or special trades at seller's option.
[6] No price data are available for CUSIP 524908W97.

Sources:
[1] Bond price data are from the Trade Reporting and Compliance Engine (TRACE) via Bloomberg L.P.
[2] FINRA.

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Exhibit 4
Bond Value as a Percent of the Value 12 Months Prior to Lehman's Bankruptcy Filing
Comparable Financial Companies

	Days Prior to Lehman's Bankruptcy Filing, September 15, 2008 [1][2][3]									
Company	365	270	180	90	60	30	15	10	5	2
Investment Banks										
Bear Stearns Companies Inc [4]	100 0%	99 4%								
Goldman Sachs Group, Inc	100 0%	102 0%	100 1%	99 3%	97 6%	98 5%	98 0%	97 4%	98 1%	96 5%
Merrill Lynch & Co , Inc [5]	100 0%	100 1%	96 6%	94 1%	93 0%	94 4%	89 8%	91 8%	90 5%	76 2%
Morgan Stanley	100 0%	100 2%	97 1%	97 7%	94 1%	95 0%	96 0%	97 1%	94 7%	95 0%
Banking and Financial Institutions [6]										
American Express Co	100 0%	101 7%	99 2%	98 8%	96 7%	95 4%	96 3%	95 4%	96 1%	94 6%
Ameriprise Financial, Inc	100 0%	101 7%	99 1%	96 4%	94 6%	95 2%	95 8%	94 6%	98 5%	99 7%
Bank of America Corp [5]	100 0%	102 3%	102 7%	102 1%	101 3%	102 3%	102 2%	102 3%	102 4%	101 7%
Bank of New York Mellon Corp	100 0%	101 5%	101 7%	101 2%	99 6%	100 7%	102 4%	101 6%	101 5%	99 4%
BB&T Corp	100 0%	100 3%	100 6%	98 1%	93 0%	93 3%	94 9%	93 8%	96 3%	96 3%
Capital One Financial Corp	100 0%	97 9%	97 1%	97 7%	94 5%	95 0%	95 1%	94 2%	93 5%	92 0%
Citigroup Inc	100 0%	99 5%	98 0%	98 5%	95 9%	97 5%	97 8%	96 6%	96 6%	96 5%
Fifth Third Bancorp	100 0%	99 5%	95 5%	92 1%	77 0%	78 2%	78 6%	78 6%	71 8%	75 8%
Ford Motor Credit Company LLC [7]	100 0%	95 9%	90 1%	96 6%	89 4%	90 6%	89 7%	90 1%	90 3%	92 0%
General Electric Capital Corp [7]	100 0%	101 1%	100 7%	98 7%	97 5%	98 7%	98 7%	98 3%	99 3%	98 3%
JPMorgan Chase & Co [4]	100 0%	100 4%	101 3%	100 2%	99 4%	99 6%	100 0%	100 4%	99 1%	99 2%
National City Corp [8]	100 0%	97 2%	92 8%	83 9%	69 2%	73 4%	71 7%	74 4%	69 7%	71 3%
PNC Financial Services Group, Inc [8][9]	100 0%	100 0%	98 1%	97 4%	97 7%	96 4%	98 0%	98 2%	100 0%	98 1%
Regions Financial Corp	100 0%	99 1%	97 0%	95 7%	93 2%	88 0%	91 3%	91 7%	90 6%	91 6%
SLM Corp	100 0%	99 7%	88 0%	98 5%	96 9%	98 6%	97 4%	97 1%	98 5%	96 4%
State Street Corp	100 0%	98 2%	98 6%	98 1%	95 7%	99 3%	98 3%	98 9%	98 5%	
SunTrust Banks, Inc	100 0%	99 8%	99 7%	95 8%	92 1%	94 4%	97 0%	94 8%	97 8%	96 4%
U S Bancorp	100 0%	100 3%	100 5%	99 8%	97 4%	99 4%	100 4%	101 2%	100 8%	101 9%
Wachovia Corp [10]	100 0%	99 7%	99 6%	97 3%	92 7%	91 5%	92 0%	90 6%	91 2%	89 3%
Wells Fargo & Co [10]	100 0%	99 5%	99 5%	99 5%	98 9%	99 3%	99 9%	101 4%	98 7%	100 2%
Mean [11]	**100.0%**	**99.9%**	**98.0%**	**97.3%**	**93.8%**	**94 5%**	**94.8%**	**94 8%**	**94.5%**	**93.6%**
Median [11]	**100.0%**	**99.9%**	**99.1%**	**98.1%**	**95.7%**	**95.4%**	**97.0%**	**96.6%**	**97.8%**	**96.4%**
Lehman [12]	100 0%	101 2%	94 3%	95 8%	93 4%	94 6%	93 2%	92 7%	82 9%	76 0%
Lehman At-Issue Note [13]	100 0%	100 2%	98 3%	99 8%	98 9%	99 3%	99 3%	99 8%	98 6%	84 5%

Notes:

[1] For figures fewer than 30 days prior to September 15, 2008, the last available trading price within the two trading day window ending on the specified date is used

[2] For figures 30 days or more prior to September 15, 2008, the last available trading price within the 30 calendar day window ending on the specified date is used Bonds without price data are excluded from this analysis

[3] Figures for companies other than Lehman are calculated as the weighted average of bond value as a percent of the bond value 365 days prior to September 15, 2008, using the company's ten largest outstanding U S Dollar corporate bond issues that were issued at least one year prior to Lehman's bankruptcy filing; in the case of several bonds qualifying for the tenth largest issuance, all are included The average is weighted by the issuance amount of each bond issue

[4] JPMorgan Chase & Co announced the acquisition of The Bear Stearns Companies Inc on March 16, 2008

[5] Bank of America Corp announced the acquisition of Merrill Lynch & Co , Inc on September 14, 2008

[6] Banking and financial institutions are identified by Capital IQ See Footnote 8 of the Expert Report for further detail

[7] The debt issuances of the financial subsidiaries of Ford Motor Co and General Electric Co (Ford Motor Credit Co LLC and General Electric Capital Corp , respectively) are nsed in this analysis to account for the non-financial business components of these firms

[8] PNC Financial Services Group, Inc announced the acquisition of National City Corp or October 24, 2008

[9] Bonds issued by PNC Funding Corp and unconditionally guaranteed by PNC Financial Services Group, Inc or its predecessor, PNC Bank Corp , are used in this analysis

[10] Wells Fargo & Co announced the acquisition of Wachovia Corp on October 3, 2008

[11] Mean and median exclude Lehman

[12] Figures for Lehman rely on the company's 25 largest U S Dollar debt issuances outstanding as of the bankruptcy filing on September 15, 2008 (see Exhibit 1) Seven of these issuances are excluded from this analysis, as they were issued less than one year prior to the bankruptcy filing

[13] The Lehman At-Issue Note is identified in the Written Report of Laurence Freed, dated July 27, 2011

[14] All prices used in this analysis are sourced from TRACE as reported by FINRA Use of an alternative source, Bloomberg Generic Pricing offered by Bloomberg L P , does not yield meaningfully different results

[15] The Capital Group Companies, Inc did not have any debt issuances outstanding as of Lehman's bankruptcy filing and is excluded from this analysis

Sources:

[1] Bond price data are from the Trade Reporting and Compliance Engine (TRACE) via Bloomberg L P

[2] Capital IQ

[3] Pricing Supplements to the Prospectuses for the debt issuances of PNC Funding Corp , CUSIPs 693476AZ, 693476BB, 693476AT, 693476AP, 693476BC, 693476BA, 693476AW, 69347UAC, 693476AV, and 693476AL

Exhibit 5

Bond Value as a Percentage of Bond Value 12 Months Prior to Bankruptcy Filing

Banking and Financial Companies with at Least $1 Billion in Assets that Filed for Bankruptcy between January 1, 2007 and December 31, 2009

	Bankruptcy	Days Prior to Bankruptcy Filing [1][2][3]									
Company	**Filing Date**	**365**	**270**	**180**	**90**	**60**	**30**	**15**	**10**	**5**	**2**
BankUnited Financial Corp.	5/21/2009	100.0%	70.1%	22.6%	21.2%	18.1%	15.8%			81.4%	
Capmark Financial Group Inc.	10/25/2009	100.0%	114.3%	80.4%	61.0%	63.1%	66.8%	56.4%	54.4%	56.3%	53.9%
CIT Group Inc.	11/1/2009	100.0%	136.8%	123.2%	93.0%	100.8%	112.0%	106.8%	109.2%	108.8%	107.7%
Downey Financial Corp.	11/25/2008	100.0%	87.9%	71.1%	62.9%	31.2%	8.2%				
Franklin Bank Corp.	11/12/2008	100.0%		42.0%	33.8%						
Fremont General Corp.	6/18/2008	100.0%	90.3%	95.3%	59.7%	91.5%	91.5%				
Thornburg Mortgage, Inc.	5/1/2009	100.0%	85.0%	24.1%	29.5%	23.1%	2.6%				
Washington Mutual, Inc.	9/26/2008	100.0%	91.3%	84.6%	87.3%	70.6%	68.4%	50.2%	33.0%	54.3%	27.5%
Mean [4]		**100.0%**	**96.5%**	**67.9%**	**56.0%**	**56.9%**	**52.2%**	**71.2%**	**65.5%**	**75.2%**	**63.0%**
Median [4]		**100.0%**	**90.3%**	**75.8%**	**60.4%**	**63.1%**	**66.8%**	**56.4%**	**54.4%**	**68.8%**	**53.9%**
Lehman [5]	9/15/2008	100.0%	101.2%	94.3%	95.8%	93.4%	94.6%	93.2%	92.7%	82.9%	76.0%
Lehman At-Issue Note [6]		100.0%	100.2%	98.3%	99.8%	98.9%	99.3%	99.3%	99.8%	98.6%	84.5%

Notes:

[1] For figures fewer than 30 days prior to bankruptcy filing, the last available trading price within the two trading day window ending on the specified date is used.

[2] For figures 30 days or more prior to bankruptcy filing, the last available trading price within the 30 calendar day window ending on the specified date is used. Bonds without price data are excluded from this analysis.

[3] Figures for companies other than Lehman are calculated as the weighted average of bond value as a percent of the bond value 365 days prior to bankruptcy filing, using up to ten of the company's largest outstanding U.S. Dollar corporate bond issues that were issued at least one year prior to the company's bankruptcy filing. The average is weighted by the issuance amount of each bond issue.

[4] Mean and median exclude Lehman.

[5] Figures for Lehman rely on the company's 25 largest U.S. Dollar debt issuances outstanding as of the bankruptcy filing on September 15, 2008 (see Exhibit 1). Seven of these issuances are excluded from this analysis, as they were issued less than one year prior to the bankruptcy filing.

[6] The Lehman At-Issue Note is identified in the Written Report of Laurence Freed, dated July 27, 2011.

[7] Banking and financial companies are those that have an industry classification of "Banking & Finance" as classified by BankruptcyData.com.

[8] Advanta Corp., American Home Mortgage Investment Corp., AmTrust Financial Corp., Capital Corp of the West, Colonial BancGroup, Inc., Delta Financial Corp., Guaranty Financial Group Inc., HomeBanc Corp., Imperial Capital Bancorp, Inc., IndyMac Bancorp, Inc., Integrity Bancshares, Inc., Irwin Financial Corp., Luminent Mortgage Capital, Inc., NetBank, Inc., New Century Financial Corp., People's Choice Financial Corp., PFF Bancorp, Inc., ResMAE Mortgage Corp., Security Bank Corp., Silver State Bancorp, Taylor, Bean & Whitaker Mortgage Corp., Temecula Valley Bancorp Inc., UCBH Holdings, Inc., and Vineyard National Bancorp are excluded from this sample, as bond price data for these issuers are not available for the relevant time period.

[9] All prices used in this analysis are sourced from TRACE as reported by FINRA. Use of an alternative source, Bloomberg Generic Pricing offered by Bloomberg L.P., does not yield meaningfully different results.

Sources:

[1] Companies with at least $1 billion in assets that filed for Chapter 7 or Chapter 11 bankruptcy between January 1, 2007 and December 31, 2009 are identified using data from BankruptcyData.com.

[2] Bond price data are from the Trade Reporting and Compliance Engine (TRACE) via Bloomberg L.P.

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Exhibit 6
Bond Value as a Percentage of Bond Value 12 Months Prior to Bankruptcy Filing
Companies in Other Industries with at Least $1 Billion in Assets that Filed for Bankruptcy between January 1, 2007 and December 31, 2009

		Days Prior to Bankruptcy Filing [1][2][3]									
Company	**Bankruptcy Filing Date**	**365**	**270**	**180**	**90**	**60**	**30**	**15**	**10**	**5**	**2**
AbitibiBowater Inc	4/16/2009	100 0%	109 3%	52 6%	33 2%	34 1%	22 6%	14 2%	26 1%	42 7%	
Aleris International, Inc	2/12/2009	100 0%	105 7%	101 9%	42 9%	12 7%	14 4%	14 0%	16 9%	2 0%	1 2%
Apex Silver Mines Limited	1/12/2009	100 0%	84 6%	55 9%	14 0%	8 9%	1 4%	2 8%	8 4%	2 8%	2 1%
Bally Total Fitness Holding Corp	12/3/2008	100 0%	66 6%	68 0%		22 7%	0 6%		0 1%		
Charter Communications, Inc	3/27/2009	100 0%	102 1%	74 3%	7 8%	7 2%	11 3%				13 4%
Chemtura Corp	3/18/2009	100 0%	102 8%	95 5%	49 4%	53 4%	41 9%	45 3%	32 4%	33 0%	31 3%
Chrysler LLC	4/30/2009	100 0%	85 1%	70 0%	63 3%	64 0%	62 6%	65 4%	65 8%	67 1%	63 4%
Citadel Broadcasting Corp	12/20/2009	100 0%	67 8%				39 5%				
General Motors Corp	6/1/2009	100 0%	71 6%	30 7%	18 2%	16 4%	13 3%	6 2%	8 1%	9 3%	13 6%
Hawaiian Telcom Communications, Inc	12/1/2008	100 0%	80 2%	39 8%	26 4%	20 8%	10 3%	0 1%			
Herbst Gaming, Inc	3/22/2009	100 0%	147 3%	38 7%	0 1%	0 1%	0 7%		1 6%	0 8%	0 7%
Idearc Inc	3/31/2009	100 0%	95 0%	36 8%	11 5%	6 1%	3 1%	3 0%	2 3%	3 1%	5 6%
ION Media Networks, Inc	5/19/2009	100 0%	105 8%	6 7%	0 5%	0 0%	0 0%				
LandAmerica Financial Group, Inc	11/26/2008	100 0%	126 4%	99 0%	84 0%	85 4%	81 7%				
Lear Corp	7/7/2009	100 0%	66 1%	53 2%	26 0%	28 7%	35 0%	26 3%	30 9%	45 7%	45 7%
Linens 'n Things, Inc	5/2/2008	100 0%	68 9%	67 9%	48 3%	42 6%	40 0%	44 7%	44 7%	51 1%	46 3%
Magna Entertainment Corp	3/5/2009	100 0%	73 4%	75 7%	63 7%	52 1%					28 4%
Masonite Corp	3/16/2009	100 0%	95 7%	41 2%	11 6%	12 3%	7 6%		4 0%		
Metaldyne Corp	5/27/2009	100 0%	51 4%	23 9%	34 2%		30 3%				
Movie Gallery, Inc	10/16/2007	100 0%	122 6%	144 4%	62 9%	25 0%	64 5%	57 3%	56 5%	50 4%	50 8%
Nortel Networks Corp / Nortel Networks, Inc	1/14/2009	100 0%	91 2%	91 3%	67 3%	29 7%	17 4%	20 8%		19 4%	22 7%
NTK Holdings, Inc	10/21/2009	100 0%	37 1%	32 9%	15 0%	14 3%	7 7%		7 3%		
Pilgrim's Pride Corp	12/1/2008	100 0%	94 3%	92 3%	89 4%	43 3%	27 5%	10 2%	10 4%	11 8%	4 6%
Quebecor World (USA), Inc	1/21/2008	100 0%	103 9%	98 1%	97 0%	90 4%	88 8%	86 9%	77 4%	70 5%	70 0%
R H Donnelley Corp	5/28/2009	100 0%	74 4%	20 6%	7 0%	11 9%	8 6%	6 4%	3 9%	12 8%	10 5%
Reader's Digest Association, Inc	8/24/2009	100 0%	40 4%	14 2%	16 9%	24 6%	7 5%			13 3%	4 2%
Six Flags, Inc	6/13/2009	100 0%	97 4%	26 1%	24 3%	16 2%	20 8%	23 7%	20 4%	19 7%	15 2%
Smurfit-Stone Container Corp	1/26/2009	100 0%	94 2%	89 8%	53 7%	27 3%	19 8%	19 4%	13 1%	12 5%	11 9%
Spectrum Brands, Inc	2/3/2009	100 0%	103 5%	85 2%	48 7%	24 3%	28 9%	29 1%	29 1%	32 8%	32 8%
Station Casinos, Inc	7/28/2009	100 0%	35 0%	14 9%	23 1%	23 8%	21 6%		14 7%	5 2%	5 2%
TOUSA, Inc	1/29/2008	100 0%	90 4%	65 9%	28 9%	16 0%	18 5%	20 8%	22 6%	18 9%	20 5%
Tribune Company	12/8/2008	100 0%	72 4%	79 7%	66 4%	59 9%	41 9%	21 7%	20 3%	16 5%	17 5%
Trump Entertainment Resorts, Inc	2/17/2009	100 0%	87 0%	63 8%	21 7%	18 9%	19 3%	19 6%	19 9%	19 6%	20 3%
VeraSun Energy Corp	10/31/2008	100 0%	98 0%	90 8%	86 1%	87 1%	59 7%	59 7%	51 7%	46 8%	35 8%
Visteon Corp	5/27/2009	100 0%	85 0%	20 0%	7 9%	8 6%	7 7%	12 8%	7 5%	8 7%	8 7%
WCI Communities, Inc	8/4/2008	100 0%	91 6%	77 0%	71 2%	59 6%	58 5%	44 3%	61 9%		59 3%
Mean [4]		**100.0%**	**86 8%**	**61.1%**	**38.9%**	**30.8%**	**26.7%**	**27 3%**	**24.4%**	**24.7%**	**23.8%**
Median [4]		**100.0%**	**90 8%**	**65.9%**	**31.0%**	**24.1%**	**19.8%**	**20 8%**	**19.9%**	**18 9%**	**17.5%**
Lehman [5]	9/15/2008	100 0%	101 2%	94 3%	95 8%	93 4%	94 6%	93 2%	92 7%	82 9%	76 0%
Lehman At-Issue Note [6]		100 0%	100 2%	98 3%	99 8%	98 9%	99 3%	99 3%	99 8%	98 6%	84 5%

Notes:

[1] For figures fewer than 30 days prior to bankruptcy filing, the last available trading price within the two trading day window ending on the specified date is used

[2] For figures 30 days or more prior to bankruptcy filing, the last available trading price within the 30 calendar day window ending on the specified date is used Bonds without price data are excluded from this analysis

[3] Figures for companies other than Lehman are calculated as the weighted average of bond value as a percent of the bond value 365 days prior to bankruptcy filing, using up to ten of the company's largest outstanding U S Dollar corporate bond issues that were issued at least one year prior to the company's bankruptcy filing The average is weighted by the issuance amount of each bond issue

[4] Mean and median exclude Lehman

[5] Figures for Lehman rely on the company's 25 largest U S Dollar debt issuances outstanding as of the bankruptcy filing on September 15, 2008 (see Exhibit 1) Seven of these issuances are excluded from this analysis, as they were issued less than one year prior to the bankruptcy filing

[6] The Lehman At-Issue Note is identified in the Written Report of Laurence Freed, dated July 27, 2011

[7] Companies in Other Industries are those that have an industry classification other than "Banking & Finance" by BankruptcyData com

[8] BearingPoint, Inc , Chesapeake Corp , Circuit City Stores, Inc , Cooper-Standard Holdings, Inc , Crescent Resources, LLC, Education Resources Institute, Inc , Extended Stay Inc , FairPoint Communications, Inc , Flying J Inc , Fountainbleu Las Vegas, LLC, Frontier Airlines Holdings, Inc , General Growth Properties, Inc , Hayes Lemmerz International, Inc , LandSource Communities Development LLC, Lyondell Chemical Company, Qimonda North America Corp , SemGroup, L P , SIRVA, Inc , Source Interlink Companies, Inc , Spansion Inc , Tarragon Corp , Tronox Inc , Tropicana Entertainment, LLC, WL Homes LLC, and Woodside Group, LLC are excluded from this sample because bond price data for these issuers are not available for the relevant time period

[9] All prices used in this analysis are sourced from TRACE as reported by FINRA Use of an alternative source, Bloomberg Generic Pricing offered by Bloomberg L P , does not yield meaningfully different results

Sources:

[1] Companies with at least $1 billion in assets that filed for Chapter 7 or Chapter 11 bankruptcy between January 1, 2007 and December 31, 2009 are identified using data from BankruptcyData com

[2] Bond price data are from the Trade Reporting and Compliance Engine (TRACE) via Bloomberg L P